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# AMERICAN BEE JOURNAL

September

1961

Vol. 101

No. 9

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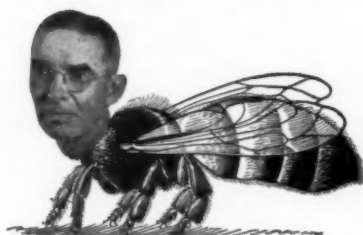


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Editor Kellogg

# Beekeeping in Other Lands

Edited by CLAUDE R. KELLOGG

Palmdale, California

## To The South Seas

by ELLSWORTH H. ADEE

We spent January, February and March 1961 on a long trip visiting our down-under neighbors. We wanted to see the sights and also to learn how people lived and we visited a number of beekeepers, especially in Australia.

Our first stay of a week was in Tahiti. This island is small and not very conducive to beekeeping but we did see 15 to 20 colonies of bees in deep shade in several places. The hives were unpainted, about 14 inches wide by 28 inches in length. The back half of the hives had doors on the sides through which to cut out the honey.

Our next stop was a week on the main island in the Fiji group. Not many bees are kept on this island but we did have an afternoon tea with Mr. Black of Suva, who keeps a few colonies as a hobby, raising comb honey or cut-comb honey and averaging about 75 pounds to the colony, of good quality and flavor. He said one beekeeper on the west side of the island had 100 colonies but the honey was dark and more like sorghum being obtained at least in part from sugar cane.

Our next stop was in New Zealand where we spent three weeks. These islands are about the size of California and are very beautiful with well kept farms and nicely painted homes with lovely flowers.

New Zealand is called by many a welfare state, with many functions being run by the government. All hospitalization is free. All calls on doctors are free except for a charge of five shillings (about 70 cents). The parents of all children under 16 receive 15 shillings (\$2.10) per week for each child. At the age of 60 many receive a pension, if they do not have too much property or too much income. All are eligible at 65.

Raising sheep is the main industry with 47 million head. Some areas

would support 10 head per acre and in more mountainous regions it would take 10 acres for one sheep. Not too much land is farmed as sheep are less work and more profitable.

New Zealand has the largest man made forests in the world. On the north island we saw one forest of 570,000 acres planted by the government and ready to be used for lumber. On the south island we saw one of 54,000 acres and another of 34,000 acres. Quick maturing pines are planted that reach harvest in 20 years.

We traveled over 3,000 miles in New Zealand by bus, train, ferry and plane. On one trip by train from the west side of the island to the east side we went through 16 tunnels, one of them 5½ miles long.

We visited with several beekeepers and in the course of our travel we saw a large number of colonies of bees. Most bee yards had from 20 to 30 colonies in a place and the hives were well supered. On the Canterbury plains west of Christchurch on the south island, we saw many locations with 10 colonies with 2 to 3 extracting supers.

We spent a very pleasant evening with Mr. and Mrs. Glenday of Christchurch. He has bees on the Canterbury plains and he said that the bee pasture is mainly Dutch clover in the meadows and since sheep pasture the major portion of it, more colonies of bees on a location would not produce a crop. Mr. Glenday's honey is heavy bodied and water white.

In Auckland we were entertained at dinner by Mr. and Mrs. I. E. Pullin. He runs over 600 colonies with 25 to 30 per location. He said locations are getting harder to find as more land is being put into cultivation and grazing. He sells his entire crop locally, mostly as creamed honey and in 30-pound and 60-pound containers.

The largest beekeeper in New Zealand runs over 4,000 colonies. Several have over a thousand with honey production up to 200 pounds per colony

in the better sections. Honey consumption averages 3½ pounds per person. Quite a number of beekeepers are packing honey and doing a creditable job but some honey still has to be exported.

From New Zealand we flew to Australia. Australia is about the same size as the United States and it would take several months to see the points of interest. It has a population of 10 million with its four large cities containing half the people. Australia has 150 million sheep and 15 million cattle. Cattle are more profitable than sheep and so are on the increase. Wheat is the major crop and one sees large quantities in storage mostly in sacks.

We were told that we were the first commercial beekeepers from the United States to visit them. I am not going to tell anyone how to run their bees as that's up to the individual but from the observations I made and from talks with beekeepers, I formed an opinion as to how I would operate. As a beekeeper, I would like to keep bees in Australia not for the profit but for the challenge it would present to try out methods I believe could decrease the expenses and the work. I saw places there that I would gladly exchange the flora for that at home where we have to get our major crop in six to eight weeks but over there I found several places where there were several chances to get a desirable crop. I know there would be obstacles to overcome and these might change operations to some extent but I hope that some of the beekeepers to whom I suggested the changes, will try them out.

Beekeepers have been doing a lot of moving to get a honey crop, sometimes long distances. In this moving they super very lightly. I could not hold the bees in the hive or get a real crop with the number of supers they use.

I would go exclusively to a central plant, increase the total number of colonies and provide more super room.



Fiji children in Suva.



Native Maori children in school uniform - Rotorura.



Bees near Rotorura, New Zealand, North Island.



Our hotel "cabin" six miles from Papeete, Tahiti.



One of Mr. Stevens apiaries near Inverell.



Eucalyptus trees near Wirrabara, South Central Australia.

The locations would not have more than 30 or 40 colonies. I would cut all moving to a minimum. I might have to feed some honey for buildup for some flows but some on the non-table honey would be cheaper than gas bills and also take this honey off the market.

In our operation of one of our outfits of 1700 colonies last year, our gas bill was \$450.00. I know one beekeeper over there who operates 1100 colonies, the majority moved long distances chasing flows and his gas bill last year was about \$1762.00. This does

not take into account the labor involved and the extra wear and tear on the truck.

Australia has vast areas of eucalyptus or gum trees of different kinds, many of which produce honey, but in some areas ground flowers like Dutch clover are getting started which are being taken into account by some beekeepers. I believe beekeeping in Australia in the next few years will make a drastic change from so much moving with from 200 to 400 colonies and caravan extracting to central extracting plants and a minimum of moving.

The honey crop in Australia in 1959-60 was 45,562,000 pounds from over 400,000 colonies, but this past year due to dry conditions, the production will be about half.

I wish to express our thanks to the Australian beekeepers we had the chance to visit. John Guilfoyle of Brisbane drove us around for three days and the Queenstown State Association gave us a complimentary dinner. We visited in the homes of F. J. Stephens and P. Stevens at Inverell. They drove us over the country-

side and gave us a chance to visit other beekeepers.

We wish to thank Mr. and Mrs. C. F. Jewell of Melbourne for entertaining us royally. He is editor of The Australian Bee Journal. We spent a pleasant day with Mrs. Rex Deer and children at Wirrabara, South Australia, 150 miles north of Adelaide. Mr. Deer was about 400 miles away with his bees and caravan.

I do not see how we can repay Mr. and Mrs. R. J. Murphy of Wirrabara for showing us around and making

it possible to see the mining operations at the 3000 foot level of the largest and richest lead and zinc mine in the world at Broken Hill.

On our way from there to Sydney to catch our plane, we spent 1½ days with Murray Charleton at Orange, who visited with us several years ago. He drove us 30 miles to Bathurst where I gave a talk to 25 beekeepers.

The honey in Australia varies a lot in color and flavor. It has more flavor than ours but the flavors on the better honeys especially after using

them for a while are very good. Australia is so large we were able to see only a small part of it in our 6,000 miles of travel. We may be going back in a year or two as it is only 24 hours by jet from here. If any beekeepers from down under pay a call on you show them wholehearted hospitality as that is what you will receive down there.

We arrived home March 27th after traveling 20,000 miles by airplane and over 10,000 miles by train and bus.

Sutherland, Nebraska

## Beekeeping In Rural Mexico

by CLAUDE R. KELLOGG\*

Beekeeping with the European honey bee (*Apis mellifera*) in Mexico began a little over 125 years ago. It was between 1830 and 1832, when Anastasio Bustamante was acting as Vice-President under Vincente Guerrero, that the first European bees were imported from Spain by the early Spanish colonizers, most probably the Dominican Fathers.

Pablo Aragon Leiva (1945), formerly in charge of the National School of Agriculture in Mexico says: "It has now been confirmed that the race of domesticated bees brought to America from the Old Continent is the Holland and not the German bee, which is was considered to be at one time. Thus it is that the black bee we have in Mexico has its origin in Holland."

Again he says "The predominant bee in Mexico is the black or Holland bee to which we may give the name *Apis mellifera*." He describes its characteristics: "They are more difficult to handle than the Italians, are nervous, run on the combs, hang in clusters at the lower corner of the frame from where they drop to the ground in a mass. Usually irritable although at times they may be handled without receiving a sting."

Wulfrath and Speck say: "When the beginner chooses a race of bees, he should exclude the 'criolla' or he will deal with a bee degenerated through the course of centuries when the first Spanish colonizers brought it into the country." In another place they say that the cross between a black drone and a selected Italian

queen produces offspring of excellent character. The bees of such a cross have been known to gather 350 kilos of honey in a single season.

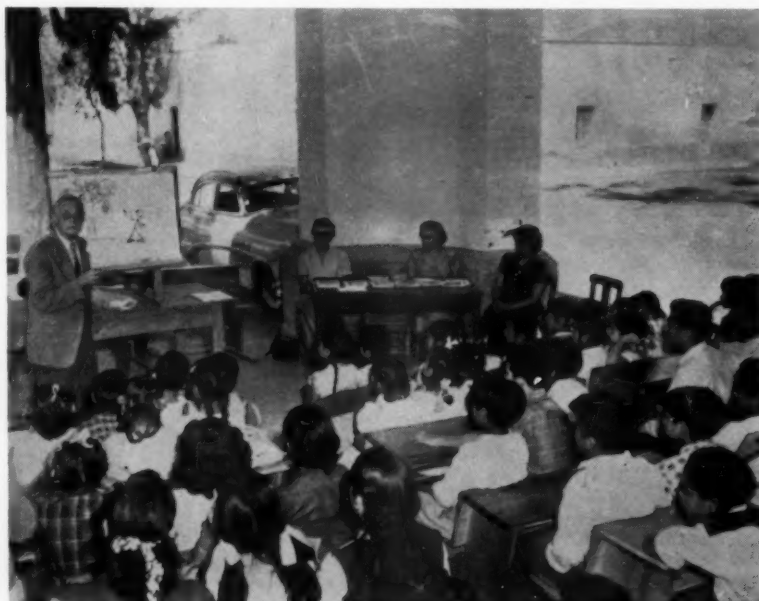
In recent years there have been many importations of Italians into Mexico so that in Cuernavaca the Miel Carlota Company and in Yucatan the Miel y Cera Company are producing excellent queens for Mexico. While the Italian bee is steadily increasing in popularity, the village beekeepers still rear the "criolla" or black bee of Holland for their box hives.

A great deal of honey is still being produced in rural Mexico in empty soap boxes, apple boxes, hollow tree trunks. The hollow trunks of palm

trees are favorites for this type of beekeeping and such hives are always laid horizontally and not upright as in the case of the log gums of the southern United States. There are two types of frameless or fixed comb hives that may be called standard for the villages, the wooden box hive and the basket hive.

### The Wooden Box Hives

In the wooden box hives, around Mexico City and other places, four boards make up the body, forming the top, the bottom and the two sides. These are all fastened together with nails or dowels and they are immovable. The two end pieces, on the other hand, are removable and are held in



Editor Kellogg delivering a lecture in a Mexican Government school near the Pyramids. He is speaking in Spanish.

\* We wish to acknowledge the help given by Dr. Jose Figuero and Dr. Francisco Rubio Lozano, both of the Secretaria de Agricultura y Ganaderia of Mexico to whom our thanks are given for permission to work in their apiaries.





A row of concrete hives in the state of Mexico.



Basket used for melting honey combs in the sun.



Basket hives in the state of Oaxaca.



Home made smoker used by a Mexican beekeeper in the state of Tlaxcala.

place by dowels. At the bottom of the end pieces, there are notches for the flight of bees. The bees are always placed on low walls or other support and covered with leaves of the century plant called "maguey" to ward off the sun and rain. The hives are never painted nor is any preservative used on the wood.

#### *The Basket Hive*

These are cylindrical about 30 inches long and 9½ inches in diameter, inside, made from a common reed called "carrizo" and plastered outside with mud, often mixed with cow manure. For each end of the hive there is a cap, also made from carrizo and pierced with holes to allow flight. They are placed on low walls or other support to keep them off the ground. They are placed horizontally and covered with the leaves of maguey. This type of hive is found in Guanajuato in Central Mexico and in Oaxaca in the south.

#### *Location of Apiaries*

Very few of the village beekeepers practice migratory beekeeping and

their apiaries are in their yards or gardens, often close to the homes. In one such home 30 or 40 box hives were located about 25 feet from the back door where the horses had to pass in front of the first row, yet the bees, since they are not disturbed very much, seem to mind their own business.

An increase in such a bee yard must wait on swarms which are skillfully taken from the trees and shaken into empty boxes, sometimes with a little honey or syrup painted on the ceiling for bait.

#### *Honey*

Honey is taken off once or twice a year, depending on the region and the season of the nectar bearing flowers. The equipment is simple. Although we have visited many beekeepers, in the villages, we have never seen a bee veil in use. Instead, a piece of yute cloth is wrapped around the head while working with the bees. In one village (Pantotla in Puebla) we saw an ingenious smoker made from a clay pitcher. It was turned upside down, with a grate in the neck of the jug. An opening in the side of the

bowl for inserting the fuel and holes in the bottom (now uppermost) for escape of the smoke.

A more common method of smoking is the use of a shovel or tin pan. Embers of burning charcoal or pieces of dried corn cobs are placed on the shovel or pan and water is sprinkled on the hot coals and the smoke which is produced is blown over the combs and bees. The bees cooperate by retreating to the other end of the hive, leaving the beekeeper free to cut out pieces of honey comb. Since there is no disturbance of the brood nest, the bees are not aroused and there is little danger of neighbors being stung. The disadvantage is, of course, that the amount of honey is small not over 5 to 10 pounds a year.

#### *Beeswax*

In Mexico beeswax is often of more value than honey because of the heavy demand for it in the making of candles for use in the churches. One of the simplest ways of separating the wax from the honey is in the use of the hands to press out the honey. The wax is then melted in boiling water and allowed to cool, after which

it may be taken from the top of the liquid.

The ingenious beekeeper in Panotla, mentioned previously, had a more refined way for separating the wax from the honey. The pieces of honey comb were put into a basket of fine weave and the basket set in the sun over a container. The honey and melted wax filtered through the basket into the container and after cooling the wax could easily be removed. The basket also strained out any refuse.

A still more interesting way was told by the principal of a boys' school. He said he could always tell when the time had come to take off the honey in his village, for nearly all of his students would be sick and absent from school. It seems the village beekeeper had the custom of inviting the boys and giving them all the honey comb they could eat at his home with the stipulation that they must save their wax and leave it for him.

#### Diseases, Parasites and Pests

The village beekeeper has to contend with wax moth, American foulbrood and European foulbrood. A species of lizard is always to be found around the bee yard and is responsible for the death of many adult bees.

Complaints are often heard about the bee eating birds. Blake lists the Eastern Kingbird, *Tyrannus tyrannus*, as found in Eastern Mexico and the tropical kingbird, *Tyrannus melancholicus*, in the South. One is often told by the farmers that eucalyptus honey is poisonous to bees. To prove this they point to the dead bees found at the bases of eucalyptus trees. Professor Aragon and the writer collected some of these bees and they showed a tiny hole in the abdomen. The conclusion is that a small bird, (unidentified) captures the bees on the wing and takes them to the top of a tree where the honey sac is extricated, leaving a neat hole and the empty body is dropped to the ground below.

Nosema is found in Mexico but there is no confirmed report of the mite, *Acarapis woodi*, that causes Acarine disease in adult bees. The parasite has been in Argentina since 1947 and has since been found in Uruguay in 1959. The fact that the government has taken the prudent step of prohibiting the importation of bees or queen bees into Mexico, should prevent the entrance of the mite. Ants often disturb the bees, sometimes causing them to abscond, while termites destroy the hives in tropical areas.

As proven by Arturo Wulfrath and Dr. Speck of Miel Carlota in Cuernavaca, and Lorenzo Camera Peon of Miel y Cera in Yucatan, the production of honey could be greatly increased in Mexico. When modern apiculture is extended over the country, Mexico will become one of the great honey producing countries of the world.



During the past nine years while directing crop protection activities for the United States Government foreign aid program, I maintained some contact with beekeeping in various countries.

My first assignment after leaving North Dakota in 1951, was to Bolivia, a land somewhat twice the size of Texas, with the rugged Andes for its western background and reaching eastward through mountain valleys into tropical lowlands.

We lived there about three and a half years in the capital city of La Paz where the altitude is about 3,000 feet. There are some 350,000 people in the city but very few beekeepers. Most of my work took me into the lower mountain valleys and the eastern lowlands in the Santa Cruz vicinity where beekeeping is more extensively developed.

## From Bolivia To Rome

by J. A. MUNRO

Santa Cruz is the headquarters of Cooperativa Apicola Crucena Ltda., a beekeepers' cooperative with a membership of 67 and a total of 1200 colonies that produced 33 tons of good quality honey in 1953, most of which was shipped to the higher mountain cities where there was a brisk market.

The beekeepers we met were friendly, hospitable and well informed on beekeeping. Bees were kept mainly for honey and beeswax. However, the beekeepers as well as the fruit growers and others seemed to be well aware of their importance in the pollination of various fruits and seeds. Modern movable frame hives were the rule, the only exception being the occasional small apiary of native stingless bees kept in small wooden or ceramic receptacles.

Apparently little research was being done on these stingless bees in Bolivia, other than observations which were being conducted by Senor Noel Kempff Mercado, a Santa Cruz beekeeper. He said that there were many species of stingless bees, mostly beneficial, but a few were troublesome because they invaded his colonies of honey bees, (*Apis mellifera*) to do them harm. The most destructive he said had been identified as *Melipona flavipennis*, a dark colored robust invader about the size of a drone bee, equipped with powerful mandibles to sever its honeybee

victims. He said that only the outlaying, weak colonies in wooded locations were most subject to damage. Despite this damage and that of other pests, including the "frio" bird and a few others, his home yard and an outyard of 130 colonies produced an average of 173 pounds of honey per colony. Because of the intense sunshine and warm weather prevailing here at times, most bee yards were provided with shade in the form of an open shed or thatched roof, or shade from trees.

There were many sources of nectar. The most important in this lowlands area was reported to be from the blossoms of *Tipuana tipu*, locally called the "Tipa" tree. (He refers to the tree *Tipuana tipu* or *Tipa Blanca*, a native of Argentina but cultivated in many countries, used in parks in Rio de Janeiro in Brazil. Also found in Cuba.—Editor Claude Kellogg.)

Some provision has been made for research in beekeeping at the Central Experiment Station of Servicio Agrícola Interamericano located near Cochabamba. This station, although at an altitude of 8400 feet in an Andes valley, enjoys a delightful climate. The experiment station had an apiary of 50 or more well kept colonies that were being maintained both for pollination, as well as for honey production.



Pictures from Ismael P. Sevilla, Malolos, Bulacan, Philippines.

Top left, a group of nuclei to which I transfer the older queens.

Top right, yard in citrus orchard among leguminous vines, a good source of nectar, comparable to your sage, clover and alfalfa; light honey with a mild flavor.

Lower right, my son is in center fixing extractor. The helper below is the owner of the orchard.



### *The Philippines*

After leaving Bolivia to begin a three years' tour of duty in the Philippines, I saw little beekeeping in this widespread country of islands. Why beekeeping is so little developed in the Philippines is hard to explain unless it might be because of the delayed introduction of *Apis mellifera*. Conversation with Dr. Faustino Q. Otanes, Chief Entomologist of the Philippines Bureau of Plant Industry in Manila, expressed the belief that beekeeping has excellent prospects in many parts of the Philippines. He said that there were a few well established bee yards in the vicinity of Manila before World War II but they suffered damage or complete destruction.

Following this, the Bureau of Plant Industry sought a chance to re-establish its experimental apiary and the opportunity came when one of its entomologists, Mr. Guillermo A. Pangga, returning from a year of special training in the United States was presented with two packages of bees by Dr. Eckert of California. The packages accompanied him on his airplane flight of nearly 8,000 miles to Manila where they were promptly installed in hives and have been increased to a sizable apiary for brood rearing studies and other experiments.

While in the Philippines, I talked to a beekeeper near Manila whose

beeyard survived the war damage and on the basis of his experience he expressed the feeling that beekeeping in the Philippines has a bright future but that it will take time and an educational program to develop it.

Aside from the honey produced by the few apiaries now in the Philippines, some honey is obtained from wild species of bees such as *A. Zonata*, which is said to build its combs

under the ledges of overhanging rock and other protected places, similar to that of a closely related species, *A. dorsata* in India.

The Filipinos who collected the honey did so with the aid of smoke or smudges like our own bee tree hunters. Most of the honey in the stores was imported from the States, Canada, New Zealand and a few other countries.



G. A. Pangga inserting uncapped honey comb in extractor. Picture taken at the Entomology Laboratory, Bureau of Plant Industry, Manila.



Dr. F. Q. Otones, formerly Chief Entomologist of the Bureau of Plant Industry, but now retired and living at Santa Ana, in a letter last December reports:

"There has been quite an interest in Italian bees in the Philippines and over twenty colonies have been sold by the Bureau of Plant Industry (B-PI) to interested people in different parts of the Island. There are only seven colonies left at the Bureau. Some of those who bought colonies want to increase them for pollination in orchards and coconut plantations particularly. Former Congressman Juan Alano of Zaneboanga Province, who is a big coconut planter, is particularly interested in this.

"Increase in bees has been quite fast on the part of enthusiastic individuals because they imported queen bees from the United States particularly Dadant's hybrids. One beekeeper in the suburbs of Manila has now over seventy colonies according to Mr. Pangga. This man Egan Chua, is a Chinese and has had considerable experience. A Catholic Bishop Alejandro Olalia of Lipa City has about twenty-five colonies. I have seen the Bishop's apiary and I am sure that he and a few others are producing good clear light honey with fine aroma

undoubtedly mostly from citrus and coconuts. Another member of the Catholic clergy who lives at Paranaque, Rizal (close to Manila), has twenty colonies. There is also a woman beekeeper, Mrs. Rafasla Vera, who lives at San Juan and has twenty-two colonies. She is the widow of a congressman killed by the Japanese during the last war.

"It should be mentioned that these people and others who bought colonies from the BPI have been selling nuclei or fairly good sized colonies and in this way, the number of apiaries in the country is bound to increase."

#### Lebanon and Rome

In 1958 my work became regional and took me into a number of countries in the Middle East and North Africa, with headquarters in Beirut, Lebanon. Lebanon was particularly interesting. It is the land of the Biblical "milk and honey," and is still so mentioned in tourist publications.

In our drives from Tyre on the south to Tripoli on the north along the Mediterranean, there were large groves of citrus, olives and bananas, as well as almond trees and gardens, while in the higher elevations of the

Bekaa Valley, apple, pear, peach and other fruits were grown instead of the more tender kinds on the lower lands. Almost everywhere one went in these areas, well kept apiaries were seen.

In the other countries of the region, I had little chance to make observations but from what I could learn, beekeeping is an old established branch of agriculture in most of the countries of this part of the world.

At times, my duties took me to Rome to attend conferences called by the Foods and Agricultural Organization of the United Nations to discuss methods of locust control. While in this city, my attention was called to stone carvings of bees in triangular patterns on a fountain at the corner of Barberini square near the Bernini-Bristol hotel. Similar carvings were noted elsewhere on buildings and walls. I was told that these carvings had been commissioned during the pontificate of Urban VIII (1623-1644). He was a member of a wealthy Barberini family, which had three bees on its coat of arms. The use of bees served to remind the public of the family's industry and generosity.

Arcadia, California

## Honey From Lavender in France

by ALIN CAILLAS\*

The constant progress of agriculture in France has more and more reduced areas where beekeepers can still practice with profit. Agricultural changes, the employment of insecticides and chemicals and changes in floral conditions bring about many problems. However, in the mountains in the southeast of France, the Pyrenees, there remains a number of places which are a veritable paradise for bees. There are thousands of acres of lavender and lavandin, two plants desirable for their essence in the perfume industry and by beekeepers for the nectar they secrete in abundance.

The true lavender (*Lavendula officinalis*) gives an extremely desirable essence much prized by perfumeries, but the plant is relatively short in vigor and does not give a great deal of the highly valuable perfume essence. So a hybrid has been created

between lavender aspic (*Lavendula latrifolia*) and the true lavender which is called lavandin, a vigorous plant full of foliage giving an abundance of perfume, less delicate than true lavender. It is also a heavy nectar producer, each spike bearing from 150 to 200 flowers and there are often 50 to 100 spikes on each plant.

Although lavender and lavandin are to be found in several of the departments in the Southeast, it is nevertheless in the Basse-Alpes where they seem to hold a record in cultivated areas in the production of perfume and of honey of exceptional quality. One often wonders how such a concentration of flowers can occur from



Some of the 250,000 colonies which are brought into the lavender fields around Riez, Basse Alpes, each year.

\* Alin Caillas is not only a prominent beekeeper with many years' experience, but also the author of *Le Rucher de Raport*, *Les Produits de La Ruche*, *Le Secret Des Bonnes Recoltes* and *Les Trois Aliments Miracles*, *Le Miel*, *Le Pollen*, *La Gelée Royale*, and *Le Pollen*, *Sa Recolte et Ses Usages*.

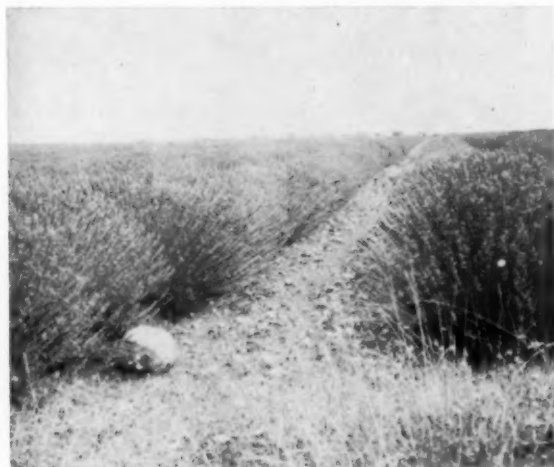




The old village of Riez and the hills covered with lavender and lavandin.



Even in the town of Riez, some stores sell lavender honey, pollen and royal jelly.



A field of lavandin in full bloom at the base of the Alpes in Provence.



Near Riez, the fields of lavender and lavandin, bloom as far as the eye can see. (All photos by Alin Caillas)

May to the 15th of July and attract such a large numbers of beekeepers. Mr. Laurin, president of the Syndicate of Apiculturists in Basse, says there were in Riez, Valensole and Moustiers, three communities at a distance of only a few kilometers from 220 to 250 thousand colonies of bees coming from various parts of France and often from regions at greater distances with the desire to profit by the abundant bloom which runs as long as the season is favorable and which may give 20 to 40 kilograms (44 to 88 lbs.) of honey to the colony.

There are few years in this region when beekeeping is not even more important than this. In 1929 the Society of Apiculturists in Basse-Alpes acted on an idea submitted by Messrs. Edmond Alphandery, of George and Raoul Alphandery, publishers of "La Gazette Apicole," that conferences be held and instruction released to im-

prove beekeeping so as to reduce the number of inexperienced beekeepers and transform them into modern beekeepers who are at the head of French production today.

We must pay respect to Monsieur Dauphin, Institute of Riez, who said in his book "Plant lavender and increase your colonies in movable frame hives." Thanks to the active folks and to the understanding of a working population who wish to place value on these denuded plateaus by the addition of calcium and other fortifiers to develop production. The little village of Riez in which the municipal council contains 13 members, 9 of them beekeepers, has actually become the honey capital of the region. Some dozen to 15 inhabitants make a living from honey production or from perfume. Lavandin in a good year would account for more than 200 tons of

honey in the southeast of France. We have no other example of such a record.

Colonies that went through the lavender flow and were at the start established in two Dadant bodies or three Langstroth and moved to the flow showed that the queens reduced laying because of lack of pollen from the lavender, although colonies given combs of pollen produce a backlog of continued laying.

Because of the rapidity of the flow, there is scarcely any brood in the hive, so the population of the colonies is greatly reduced. The hives are full of honey both in the brood chamber and the supers and it is necessary to extract all but one or two combs to allow them to survive and continue brood rearing until there is a resumption of the flow at the end of the season.

# Facts About Beekeeping In Italy

by A. ZAPPI-RECORDATI

Before and during the early years of the Second World War, Italian beekeeping was well developed. There were more than a million colonies with an annual honey production between ten and fifteen thousand tons. However, after the war, beekeeping became completely disorganized and reduced, and, although much has been regained, the industry has not yet attained an ideal level.

The principal sources of honey are leguminous forage crops, lucerne clovers and Cruciferae, especially rape, permanent pasture in the hills and mountains, lavender, mint, thyme. The harvest is uncertain due to weather, location and so on.

The bee most widespread is *Apis mellifera ligustica* in a pure strain almost everywhere except in Sicily. In certain areas near the French and Swiss borders there are hybrids with black bees and near the Austrian border hybrids with Carniolans. In Sicily we have *Apis mellifera sicula*, a primitive variety of *mellifera*. As a result of continual imports of *ligustica*, the strain is now largely impure except in the central part of the island.

Beekeeping is distributed throughout Italy, except in the very dry districts and on the high mountains. In the mountains bees are usually kept in the high valleys, and honey there noted for its high quality. In 1955, I figured that there were about 650,000 colonies, about two-thirds in movable comb hives owned by about 80,000 beekeepers.

Among the modern hives the Dadant-Blatt is widely distributed, a modified form of the Dadant hive with a different frame size. Also the Italica Carlini, in memory of Professor Carlo Carlini. This hive has a super with frames half as deep as the brood frames. In some districts the Marche hive with super and brood chamber identical, the frame being about 420 x 225 mm. Recently, the 10-frame Langstroth hive has become popular too.

Beekeeping is largely in the hands of small or medium-sized family concerns, combined with farming and also many beekeepers not farmers, belong to many different classes. The bees are mostly kept in permanent apiaries, but in certain districts migratory beekeeping is practiced in order to increase the crop. The num-

ber of concerns run by people other than their owners is decreasing, and few of them are on a large scale. These are mainly run by salaried specialists.

Of course the most important products are honey and wax but with fixed comb hives, beeswax is also produced in some quantity. Modern hives yield more honey of high quality while the honey from fixed comb hives is poorer and less of it is produced.

In Italy, honey is graded commercially according to the way it is extracted: centrifuged honey, pressed honey and run honey. The price varies also according to its designation—industrial honey, table honey, and so on. For industrial use in baking and processing tobacco, pressed or run honey is bought since it is cheaper. For the table, best quality honey is preferred. Honey is classified according to color—white, straw, yellow, etc.—according to the source.

Also, as in other countries, Italy has started to produce royal jelly, largely experimental in use and attempts are being made to discover the best way to produce and preserve it to furnish research material for the laboratories interested in it.

Italy is famous for her *ligustica* queens exported all over the world. Most of the queens are reared by specialist firms and they have been able to improve the qualities and productivity of the colonies headed by them and so they find a good market with a large commercial export trade. The race of bees from which the queens are bred is *A. m. ligustica* Spin., which is generally considered the best in the world for honey production.

The production of package bees is a much smaller venture. The market is more restricted but it could be profitably expanded.

Brood diseases no longer worry Italian beekeepers because of the use of sulfa. Adult diseases are more troublesome. Nosema is troublesome from time to time but has been largely overcome by treatment. Also Acarine disease exists in some areas and there is a never-ending struggle against it. Treatment is carried out and an entire district is kept on the alert for a fresh outbreak and in this way the spread of the disease

is restricted. Extremely good results have been obtained in curing the affected colonies.

Besides the competition from the foreign honey Italian beekeeping is faced with another danger which is the growing tendency to abandon beekeeping so that the total number of those who practice it is dwindling. One of the fundamental difficulties is that it no longer seems possible to make a satisfactory living from just beekeeping. Every opportunity must be taken to prevent this.

## Australian Notes

- According to the December Australian Bee Journal the last hope of a subsidy or bounty on exported honey seems to have been given up, when the government made it a policy to restrict rather than to expand such subsidies.

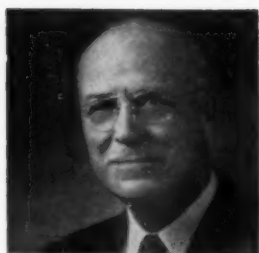
- Bush fire danger is being emphasized on account of the dry conditions in the bush. Premium for insurance of hives against fire anywhere in Australia is 15/ for each 100 pounds of Insurance (about 75c per \$100.00).

- Showing the versatility of the beekeeping fraternity, a press desire to feature beekeeping was aided by special arrangement with a queen breeder to have queens emerging from cells so that they might be sure of having such photographs available at the convenience of the photographer. A swarm was even covered carefully on its hanging limb, and sprinkled generously with a water spray to simulate a rainy day and carry the swarm over from one day to the next.

- A bee research society has been formed to promote research in beekeeping problems. Earlier in the year the society donated \$250.00 to Melbourne University to establish slides of identified pollen. Full membership is available to all interested persons at an annual subscription of \$25.00.

## British Exhibits and Fairs

October "Beekeepers' News" reports on the Birmingham (England) Honey Show where there were 767 entries of honey from 145 exhibitors from all parts of the U.K. "in spite of a poor season." Wish we had the interest over here that would bring out that much of a response.



# The Historic Northeast

## EDITORS

E. J. DYCE

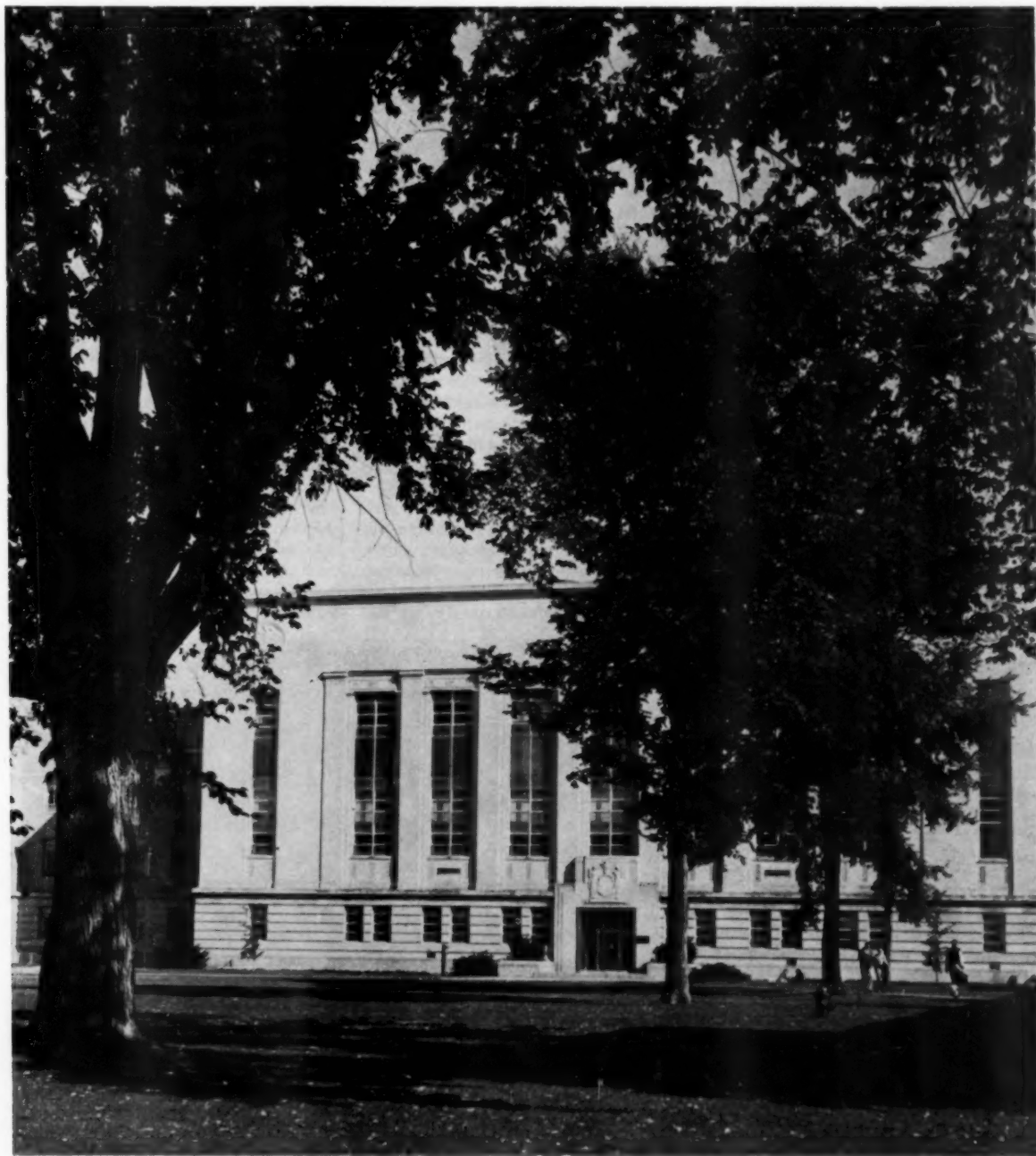
ROGER A. MORSE

Cornell University

New York - Part II



The A. R. Mann Library which houses the Dr. E. F. Phillips beekeeping library at Cornell University.





# Recent Changes In Central New York State Nectar Plants

E. J. DYCE

Cornell University

Ithaca, New York

Over the years commercial beekeepers in central and some other sections of New York State could usually count on a surplus of from forty to sixty pounds of clover honey and from sixty to eighty pounds of buckwheat honey per colony. But during recent years surpluses, especially from buckwheat, have declined to a marked degree. On the other hand, the production of goldenrod and aster honey has greatly increased.

Different things have contributed to the lack of consistently good light honey crops. Good farm practices now call for the early cutting of forage crops before honey bees have time to visit many of the blossoms. Honey bees are attracted to flowers with the highest sugar concentration in the nectar. At the present time many of our weeds are better honey plants than some of our cultivated crops. The trend to eliminate weeds in the fields as well as along the roads has added to the difficulties of beekeepers. Fortunately the common herbicides such as 2,4-D and 2,4,5-T do not appear to poison bees but they do reduce the amount of nectar plants.

## Buckwheat Honey

Up to the end of the Second World War, central New York was recognized as the hub of the buckwheat honey producing area in the eastern part of this country. This honey was normally in surplus supply and the problem of marketing it was difficult. Yet because buckwheat honey sold at a lower price than that of the lighter types of honey many people learned to like it and actually prefer it above other honeys. To each of us the best honey in the world is the one we ate as a child.

Each year letters are received from people who were raised in New York State and who subsequently moved to other parts of the country where no buckwheat honey is produced. They want to know where they can purchase good, old fashioned, buckwheat honey. To them no honey is so good and they are willing to pay almost any price for it.

Over the years considerable buckwheat honey produced in New York State was sold in retail containers; some was exported to Europe and a good share of it went to bakers in New York City and to other cities along the Atlantic Coast. Most of this honey purchased by bakers was

used to make buckwheat honey cakes. For many years the demand for buckwheat honey in the baking trade gradually increased. This was brought about mainly by supplying them with a constant source of a uniform blend of pasteurized, well strained buckwheat honey. Bakers dislike to purchase small lots of honey direct from beekeepers, because the honey may vary in color and flavor, and may ferment before it is used. The handling of honey by packing plants with facilities to properly blend and pack large quantities of honey created an ever increasing demand for this honey.

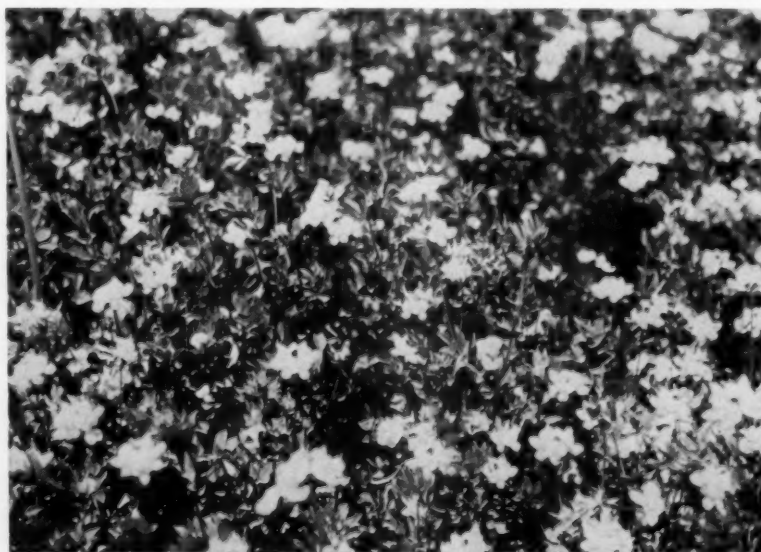
Following the Second World War the picture changed. The production of buckwheat honey gradually declined and now there is not enough to meet the demand. Reduction in the acreage of buckwheat planted for seed is the chief reason for this situation. Less buckwheat flour is used in pancake mixes and in formulas for feeding chickens and other animals, and less seed is exported. The demand for buckwheat seed soon declined and most of the farmers stopped growing it.

## Goldenrod and Aster Honey

Another angle to the over-all picture is that thousands of acres of marginal land around many villages, towns and cities now grow little but weeds—chiefly goldenrods and asters. Many people who formerly worked

this land now work in nearby cities and towns. Goldenrods normally start to yield nectar about August first and a little before buckwheat commences to yield. Where goldenrods thrive on many acres, a large percentage of bees start to work these flowers. The bees prefer to remain with goldenrods and few of them appear to switch over to buckwheat when it starts to yield. This results in a decline in the amount of buckwheat honey produced even in areas where considerable buckwheat is still grown for seed. In other words in New York State during recent years there has been a gradual decrease in the production of clover and buckwheat honeys and a gradual increase in the production of goldenrod and aster honeys.

Fortunately, goldenrod and aster honeys are lighter in color and milder in flavor than buckwheat honey. Several bakers who could not use buckwheat honey are able to use a good uniform blend of these honeys. Few bakers have the space or wish to go to the expense of warehousing their annual supply of honey. The packers who are willing to provide this service will naturally get the business. The problem of securing a good price for non-table grade honeys appears to boil down to supplying manufacturers throughout the year with a well packed uniform blend of honey.



Bird's-foot trefoil.



Over the years many packers have actually been encouraging consumers to eat light mild flavored honeys. In order to increase sales they or their brokers have played up the point that their honey is lighter than their competitors. The buyers accept this argument and if the honey is actually lighter than that offered by other packers they buy the honey. This results in a competitive race between packers to pack the lightest possible honey. Parents and their children who are constantly offered light mild-flavored honeys soon learn to prefer these to all other types of honey.

Some packers put up a good blend of amber honey as well as a light honey for the retail trade. The amber honey is offered at a lower price and it usually enjoys a good demand. This is a step in the right direction and should be followed by more packers. Most people think of honey as golden or amber in color, not water white; yet we constantly teach the public to buy white or water white honey. We then turn around and complain about our large surpluses of amber and dark honeys. It is unlikely that there will ever be enough light or water white honey produced in this country for table use. As our population increases the honey will likely become darker in color. At least this is what appears to have happened in other heavily populated countries.

Heather honey, like buckwheat honey, is dark in color and rather strong in flavor. Most people who taste it for the first time do not like it. On the other hand, in countries where it is produced in quantity, it is

in great demand. In the British Isles, for example, it sells for the highest price, in fact, in this State during recent years buckwheat honey has been selling at about the same price as clover honey. It is largely a matter of consumer education and we are making a mistake if we do not educate the future generation to enjoy darker blends of honey.

#### Bird's-foot Trefoil

During and following the Second World War much interest in bird's-foot trefoil (*Lotus corniculatus*) developed in New York and other nearby states. Special care is necessary in planting trefoil but when it is well established it makes an excellent forage and pasture crop, similar in food value to alfalfa and other legumes. It is a winter hardy perennial which can stand close grazing even by sheep and it grows well on soils which are not quite good enough for alfalfa. Over the years trefoil has steadily increased in popularity and it is now estimated that over 500,000 acres have been planted to this crop in New York State.

There are two main types of bird's-foot trefoil—the narrow and the broad leaf. The narrow leaf type is seldom planted by farmers but it escaped in a few areas and has become well established along road sides especially in the Hudson Valley. There are two varieties of the broad leaf trefoil—European and Empire. These are planted extensively as forage and pasture crops. The European variety has a blossoming period earlier than the Empire but both

varieties produce a scattering of blossoms throughout the summer months.

All varieties of trefoil produce an abundance of pollen but it has been difficult to determine their true value as nectar plants. In northeastern New York and Vermont good yields from trefoil have been reported but farther south in the Schenectady and Albany areas most beekeepers question their value. On the other hand trefoil honey closely resembles clover honey in color and flavor. Since the main blossoming period occurs about the same time as alsike and white Dutch clover it is difficult to accurately evaluate trefoil as a nectar plant.

The sugar concentration of trefoil is usually a little lower than that of clovers and some other common plants that blossom about the same time. This would explain in part why more bees do not work trefoil during the clover flow. In areas where there is a great deal of trefoil, light honey crops during recent years have been increasing a little. Since trefoil produces some blossoms throughout the summer it is possible that the bees work many of these flowers when little or no other nectar is available. The total amount of nectar gathered from these blossoms might account at least in part for the recent increase in light honey crops during the past five years.

#### Wild Thyme

Around the turn of the century wild thyme (*Thymus serpyllum*) became well established in the northern part of Delaware County in New York State. Over the years it has gradually spread over thousands of acres in all directions but chiefly in Schoharie and Otsego counties. Small areas are also found in Vermont and other Eastern States. It is a creeping perennial plant with purple flowers which blooms mainly in July and August. It is a shallow rooted plant which is highly dependent on moisture. When conditions are right it secretes an abundance of nectar which the bees eagerly gather. The honey is light amber in color with an aromatic odor which gradually disappears after being extracted. Several commercial beekeepers living in or around the thyme area obtain good crops from this plant nearly every year.

In this world we will always encounter changing conditions. Those who make an early basic study of these changes and give them sufficient thought are usually able to cope with the situations and succeed.



Wild thyme

# Thyme Changeth The Order of Beekeeping

by M. P. TRAPHAGEN



Two similar views of the display at Traphagen's during State Honey Producers' Association meeting.

Probably no other subject is of more material interest or vital importance to the honey producer than is the principal and major honeyflow of his particular area of operations.

In this particular area of the Northeast, (In the days of yesterday,) with our steep rocky hillsides for pasture land, shallow sour soil in the small meadows that grew mostly June grass, surplus honey was a rarity. After June 30th the meager amounts of clover and raspberry bloom and flow was completely over.

Basswood has not yielded a surplus since about 1912 due to the intensive lumbering operations of the Catskill Mountains. Then about Sept. 1st goldenrod usually provided sufficient stores for wintering. However about 1930 a new source of nectar began to make itself welcome.

Thyme (the seasoning herb) a slow creeping dominating plant gradually takes over and almost completely covers the ground area wherever plant growth is retarded such as by grazing cattle, lawn mowers, and in a good many instances by uncultivated fields or abandoned land in general. How thyme actually was imported to this country is debatable. Some sources of information claim it was brought here on the fleece of sheep from Greece. Although it is possible it was brought here as a source of seasoning supply, a house plant or as a plant for medicinal purposes. Greece being the native home of several varieties which seem to differ in color only. The plant size and structure seem to be the same.

Be that as it may the older residents of Delaware County seem to think it originated in the extreme eastern section of Delaware County around the village of Grand Gorge, possibly and probably about 150 years ago. Up to the present time it has spread to a semicircle of approximately 45 miles diameter to the western half of Greene, Schoharie, Schenectady and Albany counties. It then

jumps about 40 miles to a large acreage in Otsego County. Also quite a stand in the Champlain Valley where a little surplus is secured.

Thyme starts to bloom about July 10th, then like clover, about 10 days after the first full blossoms open, the plant is usually in full bloom by the 20th of July. This intensive bloom lasts to about Aug. 15th providing there is the proper amount of mois-



Traphagen's unusually fine honey house and display quarters. More honey goes out of this salesroom in retail packs from a producer-retailer than anywhere in the East.



Group of four photographed at the state summer meeting: left to right, Everett Clark, president; R. B. Willson, New York City; Dr. D. C. Jarvis, of Folk Medicine fame, and M. P. Traphagen.

### *To the Honorable Senate and House of Representatives of the United States:*

Your petitioners respectfully represent to your honorable body:—

1. That the sweets now in use in the United States, including cane-sugar, maple-sugar, syrups, candies, jellies, honey, etc., are often adulterated with glucose, and sometimes are manufactured entirely of it.
2. That this glucose is manufactured from corn starch, by boiling the starch with sulphuric acid, (oil of vitriol), then mixing with lime. The glucose always retains more or less of sulphuric acid and lime, and sometimes it has copperas, sucrate of lime, etc.
3. That seventeen specimens of common table syrups, were recently examined by R. C. Kedzie, A. M., Professor of Chemistry in the Michigan State Agricultural College, at Lansing. Fifteen of these proved to be made of glucose; one of the fifteen contained 141 grains of sulphuric acid, (oil of vitriol), and 724 grains of lime to the gallon; and another, *which had caused serious sickness in a whole family*, contained 72 grains of sulphuric acid, 28 grains of sulphate of iron, (copperas), and 363 grains of lime to the gallon.
4. That the American people are pre-eminently a sugar-eating people. The consumption of sugar, by each individual in our country, is shown by statistics to be about 40 pounds a year. It is seen at once that the adulterators of sugars and other sweets, not only cheat our people in the quality of what they consume, since glucose contains only from 30 to 40 per cent. of sugar, but injure also the public health, by selling under false names, an article injurious to health.
5. It is as much the right and duty of Congress to enact laws against such frauds in food as it is to enact laws against frauds in money, for if the counterfeiters of money injure the public wealth, the counterfeiters of food injure the public health.

In view of the above facts your petitioners earnestly request your honorable body to decree that the adulteration of sweets, and the sale of such adulterated products, are crimes against the people, and to enact laws for the suppression of this illegal business.

And your petitioners will ever pray.

A copy of a petition sent to the U. S. Congress in 1778 with the signatures of 10,000 beekeepers. At the time there was considerable adulteration of honey in this country and essentially what the beekeepers were asking for was the enactment of legislation to prevent this adulteration. Beekeepers continued to be active in this area and in part because of their activities the Pure Food and Drug Laws were passed by the Congress in 1906.

Because there was considerable adulteration of honey prior to 1906, the word "pure" was put on honey labels by beekeepers. This habit has persisted to the present time.

Since 1906, there have been only one or two cases of honey adulteration and these were prosecuted by the Pure Food and Drug Administration. Because of the continued vigilance of this organization, beekeepers in the United States have been able to establish a reputable market.

ture in the soil. However in a dry season there may be no yield as I well recall the first 2 years in succession I had bees on thyme they did not get honey enough for normal brood rearing.

Under normal conditions the plant will provide a source of nectar to Sept. 1st. Of course one reason it provides a surplus is that by July 10th most colonies are strong and populous ready to gather a crop of honey or to be divided for increase.

It would be my opinion that in good years possibly a surplus of 200 ton of honey is produced from this plant. Occasionally 200 lb. per colony is harvested.

The closely pastured uplands seem to be ideal for its growth and the hill-sides present a gorgeous sight at full bloom resembling a massive endless carpet of crimson as it only grows to a height of about 5 inches high.

The honey is readily salable as it has a distinctive flavor and once one learns to like it you have a repeat customer. The color is a golden amber; it also has a particular characteristic of granulating readily and being exceptionally smooth, being the same texture as honeycream.

It has been our custom of late years to have sample bottles with spoons at hand to allow customers to sample the six varieties, on sale. Usually most customers take a second helping of thyme to determine if they care for that particular flavor. This little gesture sells a nice quantity of honey throughout the season and thyme goes as well as the other varieties.

However I know of several honey producers that have a definite dislike for the taste, smell and color of thyme honey. In fact, they think everything about it is disreputable. Yet they enjoy their "dill pickles, Limburger, and eels" which is OK with me.

### **Death From Parathion**

Two boys, cousins, in Marathon County, Wisconsin, were recently killed by poisoning from parathion. The insecticide was used on potatoes. Some of the spray drifted into the area where one child was playing. The other child entered a barn after it had been sprayed. Both died. Parathion can be absorbed through the skin in lethal amounts.

The item comes from National Wildlife Federation in Washington and it shows that the danger from the absorption or consumption of residual insecticides is not just a joke.





T. S. K. Johansson, Department of Biology, Queens College.

These paragraphs are being written in the black topped suburbia of greater New York City, 12 miles from Manhattan. You would probably take good odds against finding any apiculturists in the area but would lose your money. A leisurely 10 minute stroll away from this typewriter are three colonies alongside one of the busiest thoroughfares in the city and 2 miles farther are two more in the orchard of the Newtown Agricultural High School.

There are probably 30 hobbyist beekeepers amongst the 8 million inhabitants of the 5 boroughs according to F. W. Gravely, manager of the last of several bee supply houses



Bees in orchard at Newton High School Annex in Flushing with buildings of Queens College in the background.

## New York City

T. S. K. JOHANSSON  
Flushing, New York

established in Manhattan during the past 90 years. Others, like Mr. Gravely himself, keep bees in the suburbs surrounding the city. Hans Hock, a third generation beekeeper from Germany who recently retired from the bee supply business in Brooklyn, manages 2 colonies in Kew Gardens and produced 320 pounds of basswood surplus this past season.

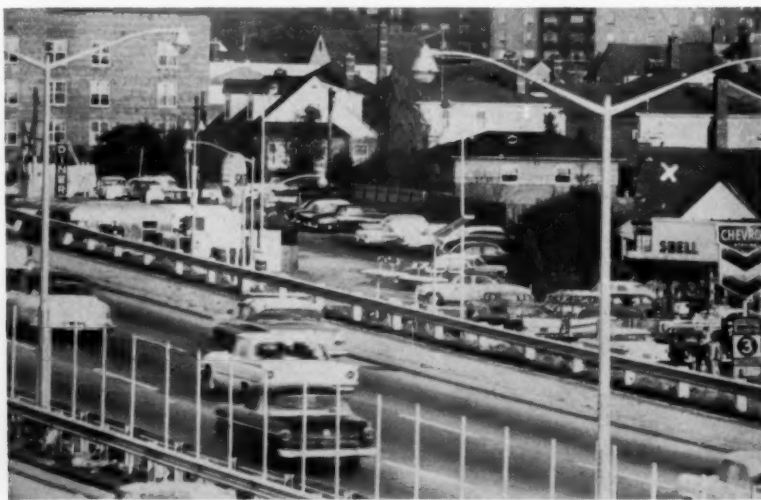
As sprawling housing developments invade vacant lots and fields, the city beekeepers retreat. Since 1950 there has been a continual slow attrition of the 50 or more members of the Bronx County Beekeepers Association to its present "koffee klotch." The Westchester, Bergen and Suffolk County Associations provide a relaxing mixture of bee talk and sociability for commuters who live on the fringes but work in the canyons of Manhattan. The bees which ship rigger Louis Seeley sent to Long Island in 1959 after complaints from his Harlem neighbors may have been the last colony in Manhattan but even though it is becoming a rarity to spot a hive in N.Y.C., thousands of visitors each year watch bees that inhabit the bee tree installed in a glass compartment of the Reptile House at the New York Zoological Park.

The city beekeeper's chief problem is neighbors when the bees seek water at their outdoor taps and pools. Stanley Einzig stopped complaints by

taking most of his colonies to the Catskills and providing a constant water supply for three or four hives left in Flushing. Commercial beekeepers in California have this same problem when swimming-pool suburbanites move into beekeeping locations. For three weeks in 1905, New York newspapers carried items about the bees on a roof robbing a nearby candy factory. The combination of nectar dearth and screenless buildings must have frequently led to strained relationships as this terse statement by "E.P." in 1861 suggests: "I have kept bees in the upper part of the city of New York for many years, where they steal from sugar houses and groceries. . . ."

New York City has always been an important center for honey and wax but on a vaster scale today than in 1850 when M. Quinby shipped a barge of honey down the Hudson and broke the market. His brother was one of the commission agents trading in bee products. Across the East River in Flushing, a nursery center in the 19th century, the first Italian bees imported directly from Italy were established at the Parson's nursery by L. L. Langstroth in 1860. This event was commemorated in an exhibit on *Bees and Civilization* at Queens College and a course with that title has been proposed for the General Studies program.

Around the turn of the century



This busy scene in the borough of Queens doesn't seem like an ideal bee location but, behind the house marked with an "X," three colonies belonging to Stanley Einzig, averaged 60 pounds of honey in 1960.





Breeding and Rearing of Queens: Illustrations from books, pamphlets and reprints describe queen rearing. The perfection by Lloyd Watson of Nelson McLain's pipette insemination and its import for breeding was noted. (Displays by Dept. of Biology, Queens College)



Biology of Bees: Embryology, anatomy, wax manipulation, pollen loading, communication and the importance of pollination were illustrated. Pertinent quotations such as "The Bees' behavior in the beehive is unbelievable" (Charles Chaplin, *Limelight*) made a hit with the scholars.

there were enough hives of bees in the three large city parks to require the services of a city apiarist at \$1200 per year. A school teacher, Miss Emma V. Haggerty, placed first on the civil service examination but the commissioner passed her by in favor of a man, John H. O'Mara, fourth on the list. Miss Haggerty introduced beekeeping into P.S. No. 190 several years later and her try for city apiarist was recorded poetically:

Bees  
J.A.

Say their judgment was B-lated,  
C.S. men have wisely done;  
Though a woman's not B-rated  
Just B-cause she rates "A 1."  
Board, B-hind its rail B-leaguered  
By the beats of politics  
May B-moan the way it figured  
When fair Emma took the tricks.

No B-sotted Bee the B-som  
Of B-nighted woman fears;  
On her face he's sure to see some  
Female smile which honey smears.  
"Oh, B-ware B-skirted woman"  
Is a B-atific plan,  
Civil Service men are human,  
Job's B-stowed upon a man.  
Let the fair girl stick to sonnets  
On the billows and the breeze,  
Since the Bees buzz in the bonnets  
Of the men who'd boss the Bees!

### California Association on the Ball on Insecticides

Twenty percent of the insecticides applied on farm crops are applied in the State of California. No wonder then that the California Beekeepers Association has as one of their main projects the minimizing of the danger and the losses from such sources.

The Agricultural chemical people propose to avert any danger of drastic re-action to objectionable chemical bee losses through co-operation. But theirs is a difficult job since not only will losses be reflected on the chemical itself, but also on such farmers as may inadvisedly apply such insecticides at improper times.

W. T. Huston of Corona who has on his letterhead "Bees for Pollination" is one of the movers in the committee on a better break for the beekeepers in the application of various chemicals which may be dangerous to the beekeeping industry. Some of the chemicals mentioned in the

## Miscellaneous Items

article are, Calcium arsenate, Lead arsenate, Paris green, TEPP, Parathion, Methyl parathion, EPN, OMPA, Systox, Phosdrin, Thimet, DIsiston, and probably more by the time this article is published.

### Honey for Olympic Athletes

Bernie E. Hayes of Wellsville, New York, sends a clipping from the Cedar Rapids Gazette written by Will Grimsley about the diet of the American Olympic teams at Rome. It is strictly a high protein diet, plenty of meat, no gravies or mayonnaise; no special foods are being brought from the States. The man in charge of the diet of the athletes, Charles Ornstein, found that the foods available in Rome including the water were very good without any importations.

He listed as a typical menu for breakfast - a juice, cereal, stewed prunes, or fruit compote, eggs and bacon or ham, toast or rolls and butter, pure honey, milk and coffee, and fresh fruits.

### New Brazilian Book

"Apicultura Cientifica e Pratica" is the title of a 150 page paper bound volume on beekeeping just appearing from the offices of the Secretary of Agriculture in the State of Sao Paulo in Brazil. The book was authored by Warwick E. Kerr and Erico Amaral. It treats of all phases of beekeeping and is intended for the development of beekeeping in Brazil. This country is already one of the principal sources for our imports of beeswax into the United States, which now totals some five million pounds a year.

### Beekeeper Believes in Advertising

Blue Bonnet Apiaries, headed by that veteran beekeeper E. B. Ault, believes in advertising his profession and his industry. Just previous to Honey Week in early November he took a full page in his local (Weslaco, Texas) newspaper to publicize the week, and to dwell on the richness and value to the user both of honey and of royal jelly. The write-up was accompanied by five cuts, and a good write-up it was.

# Apicultural Science

Editor, DR. WALTER C. ROTHENBUHLER  
Iowa State University  
Ames, Iowa

## *Influence of Storage on the Nutritive Value of Pollens For Newly Emerged Honeybees\**

MAYKOLA H. HAYDAK, Department of Entomology and  
Economic Zoology Institute of Agriculture,  
University of Minnesota, St. Paul 1, Minnesota

Pollen is important in the life of the colony of bees because it supplies the necessary food for normal growth and development. Newly emerged bees need pollen not only for the preparation of the larval food but also for their own growth. Haydak (1934) showed that in a normal colony freshly emerged bees, having plenty of pollen for food, gain weight and the nitrogen content of their bodies increases. In comparison with newly emerged bees, five-day-old bees had 92% more nitrogen in their heads, 76% more in their abdomens (without digestive tracts) and 37% more in their thoraces. When newly emerged bees were fed only sugar solution, they lost body weight and nitrogen, their mortality was high, and they were unable to rear brood (Haydak, 1937).

The bees do not always have enough pollen. Adverse conditions in the spring may prevent them from collecting enough pollen for normal growth

and development of their colonies. In this case beekeepers quite often give them pollen substitute or pollen supplement. In preparing the latter usually about one year old pollen is used. However, nutritional studies of Hejzmanek (1933), Svoboda (1938, 1940), Maurizio (1954), Levin and Haydak (1957) and Haydak (1958) indicated that the food value of pollen diminishes with age, although De Groot (1953) did not find this in his longevity studies with bees.

The purpose of the present work was to determine quantitatively the nutritive value of pollen, stored at room temperature during various lengths of time, for the development of newly emerged bees. The influence of such pollens on growth as determined by changes in body weight and nitrogen content and on the development of their hypopharyngeal (brood food) and mandibular glands was followed.

Pollen pellets collected from pollen traps, air dried and stored in tightly covered jars, were available from the years of 1952, 1958, 1959 (one year old); and beebread was available from 1936. Air dried fresh

pollen (1960), taken from the pollen traps in the bee yard, and diluted honey were used as control foods. Paste made of 25 g. pollen, 13 cc water and 60 g. honey was smeared into cells of small combs placed in screened nuclei. Diluted honey (13 cc water and 60 g. honey) was poured directly into the cells of such combs. Thirty to 40 g. of newly emerged bees were introduced into each nucleus. Water was supplied by small vials sealed with a double layer of cheesecloth and inverted over the top screens.

The samples (50 bees) were taken out at 3, 6 and 8 days. The heads, abdomens (without digestive tracts) and the thoraces were separated, weighed and dried to constant weight in an oven at 102°C. The dry weight and the nitrogen content (Kjeldahl) of the dried parts was determined.

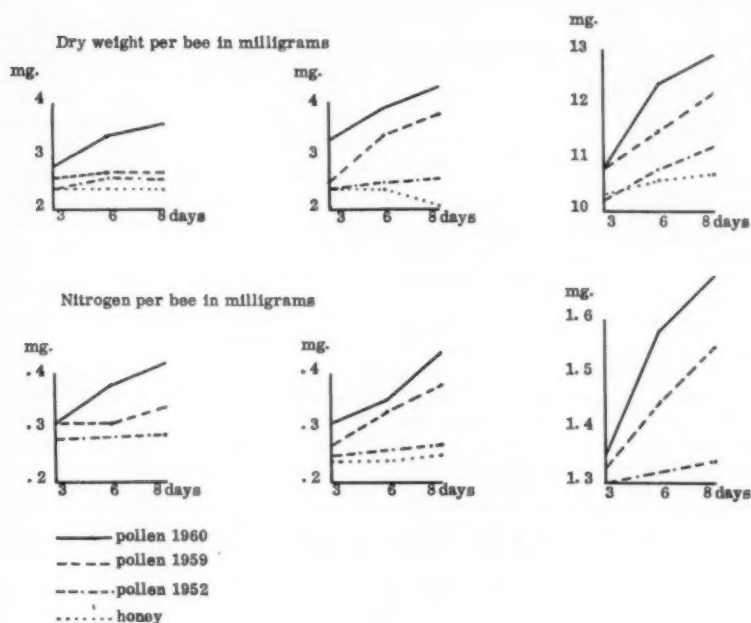
The brood food glands and the mandibular glands of 15 to 26 eight-day-old bees were examined under a microscope and the state of their development was noted.

Table 1 and Chart 1 show the results of the weight and nitrogen determinations.

Table 1. Changes in dry weight and nitrogen content of newly emerged bees fed pollen stored for various periods of time.

| Description of diet            | Dry weight per bee in milligrams |                       |          |       |                       |          |       |                       |          |
|--------------------------------|----------------------------------|-----------------------|----------|-------|-----------------------|----------|-------|-----------------------|----------|
|                                | Heads                            | 3 days old<br>Abdomen | Thoraces | Heads | 6 days old<br>Abdomen | Thoraces | Heads | 8 days old<br>Abdomen | Thoraces |
| Pollen 1960                    | 2.8                              | 3.3                   | 10.8     | 3.4   | 3.9                   | 12.4     | 3.6   | 4.3                   | 12.9     |
| Pollen 1959                    | 2.6                              | 2.5                   | 10.8     | 2.7   | 3.4                   | 11.5     | 2.7   | 3.8                   | 12.2     |
| Pollen 1958                    | 2.6                              | 2.6                   | 10.6     | 2.9   | 3.0                   | 11.7     | 2.9   | 2.8                   | 11.8     |
| Pollen 1952                    | 2.4                              | 2.4                   | 10.2     | 2.6   | 2.5                   | 10.8     | 2.6   | 2.6                   | 11.2     |
| Beebread 1936                  | 2.5                              | 2.6                   | 10.0     | 2.7   | 2.6                   | 11.1     | 2.7   | 2.5                   | 10.9     |
| Honey                          | 2.4                              | 2.4                   | 10.3     | 2.4   | 2.4                   | 10.6     | 2.4   | 2.1                   | 10.7     |
| Nitrogen per bee in milligrams |                                  |                       |          |       |                       |          |       |                       |          |
| Pollen 1960                    | .31                              | .31                   | 1.35     | .38   | .35                   | 1.58     | .42   | .44                   | 1.68     |
| Pollen 1959                    | .31                              | .27                   | 1.33     | .31   | .33                   | 1.45     | .34   | .38                   | 1.55     |
| Pollen 1952                    | .28                              | .25                   | 1.30     | —     | —                     | —        | .29   | .27                   | 1.34     |
| Beebread 1936                  | —                                | —                     | —        | .30   | .26                   | 1.36     | .29   | .26                   | 1.36     |
| Honey                          | .28                              | .24                   | 1.30     | .29   | .24                   | 1.30     | .29   | .25                   | 1.34     |

Chart 1. Changes in dry weight and nitrogen content of newly emerged bees fed pollen stored for various periods of time.



From the table and the chart it is evident that the storage for only one year considerably lowered the nutritive value of bee collected pollen. The food value of pollen diminished still further as the storage time increased. Eight-year-old pollen was almost worthless for the development of young bees.

Comparison of the growth curves showing changes in weight with those for the changes in nitrogen content of growing young bees supports the statement of Haydak (1937a) that in certain cases the rate of development of young bees can be determined by ascertaining only the dry weights of thoraces of experimental bees.

Microscopical examinations showed the age of pollen consumed by the nurse bees plays a very important role in the development of their brood food glands (Table 2). Fresh pollen

was 100% effective, while the effectiveness of even one-year-old pollen dropped to 24%. Two-year-old pollen was worthless for the development of the brood food glands. Similar results were obtained by Hejtmanek (1933) and Maurizio (1954). These differences were not as striking in the case of the mandibular glands.

#### Conclusions

In storage, pollen loses its nutritive value for growth of newly emerged bees. One year-old-pollen loses about 75% of its ability to cause the development of the brood food glands. Two-year-old pollen is worthless in this respect. The influence of the age of pollen consumed by bees in the development of their mandibular glands is not as striking as in the case of the brood food glands.

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#### Honey Bees and Toxic Poisons

Vol. No. 2 of the bulletin "Apicole" of the Research Laboratories in Nice, France, 1960, devoted some 80 pages to the subject above. Only two pages discuss natural difficulties, like some instances of toxicity from buckeye, rhododendron, camellia, azalea, etc. reported in bee literature.

The balance of the report consists of both reports and investigations on the results of the application of various dusts and sprays used in agriculture today, both as a direct death on application to the bee itself and by the inhalation or consumption of the nectar or pollen.

Naturally the report urges the use of sprays and dusts which are least harmful to honey bees. A considerable bibliography on the subject is included.

Table 2. Percentage of bees having various stages of gland development

| Description of diet | Hypopharyngeal glands   |  | Mandibular glands                                 |   |
|---------------------|---|--|---|---|
|                     | Active<br>(Full, turgent, milky, spore; Axial duct not visible)<br>per cent | Underdeveloped<br>(Milky hyaline, translucent, axial duct visible)<br>per cent | Active<br>(Fully of milky secretions)<br>per cent | Underdeveloped<br>(Rather flat, little or no milky secretion)<br>per cent |
| Pollen 1960         | 100   | 0  | 89  | 11  |
| Pollen 1959         | 24  | 76   | 74  | 26  |
| Pollen 1958         | 0   | 100  | 44  | 56  |
| Pollen 1952         | 0   | 100  | 33  | 67  |
| Beebread 1936       | 0   | 100  | 47  | 53  |
| Honey               | 0   | 100  | 43  | 57  |



## A New Way to Remove Supers of Honey

PA (Propionic Anhydride), a volatile chemical, has been developed by the United States Department of Agriculture under the direction of Dr. C. L. Farrar, Bee Culture Investigations, Madison, Wisconsin.

For the use of propionic anhydride (PA), an absorbent pad, impregnated with propionic anhydride, is placed in a special fume chamber fitted over the top of an empty super. Below the absorbent pad and still in the empty super is the fume chamber into which the fumes of the anhydride are pumped with a regular smoker bellows and forced through holes in a dispersion board so that they are distributed evenly over all the combs of the honey super.

In the experiments which led to the approval of this material, it was demonstrated that laboratory mice were not irritated or injured. Bees returned to the combs within a few minutes and there is no detrimental effect on the colony.

This new procedure is simple and very quick. There was no change in the honey flavor or odor and the material is relatively inexpensive.

Two men using a single fume chamber can remove 100 shallow supers in 90 minutes or about 1½ to 2 minutes each for a full depth Langstroth super. Propionic anhydride is relatively non-corrosive to the operator's hands although some care should be exercised to avoid direct contact as has been the case, only more so, with the use of carbolic acid. Washing the hands when necessary is sufficient to remove any of the material.

Propionic anhydride is safe for use in handling food products and has been used in other industries for some time. When the material is used for repelling bees, the full strength anhydride is mixed in equal parts with water and about 2 tablespoons of mixture are sprinkled over the absorbent pad, the fume chamber placed on the top of the super, and the bellows used to give 5 to 6 air blasts. After about a half a minute, the air charge is repeated with from 8 to 10 blasts. Too much air will cause the fumes to stupefy the bees and too little will delay their movement from the supers.

Here are the points to know about this new chemical:

1. **FASTER**—Bees are driven from supers of honey in one to two minutes. Because of this speed, there should be less robbing during honey removal in an apiary.

2. **WORKS IN ALL WEATHER AND IN SUN OR SHADE**—The use of a fuming chamber, placed above the super to be removed, and a bellows to diffuse the fumes, causes the material to cover the combs evenly regardless of other conditions.

3. **GENTLES THE BEES**—Agents

formerly used to remove honey had a tendency to make the bees more irritable. Propionic Anhydride seems to "tranquilize" to a great degree.

4. **NON-INJURIOUS TO BEES**—Bees are driven away without any damage to them, and will return to the combs within minutes after the fume chamber is removed.

5. **HONEY FLAVOR AND ODOR NOT AFFECTED**—And it is safe to use in foods.

6. **NOT AS DANGEROUS AS MATERIALS FORMERLY EMPLOYED**—Normal caution is required concerning prolonged contact with the skin, but the material is non-corrosive to the hands. (Page 369)

## California Bee Laws Revised

by H. LEN FOOTE, Supervisor  
Apiary Inspection

Beginning September 15, California beekeepers will be required to identify each out-apiary with a sign showing their name, address and phone number, or a number assigned to them by the Director of Agriculture. The lettering on the sign must be black and at least one inch high. The sign is to be placed at the entrance side of the apiary.

The purpose of this change is to provide a more dependable means of identifying apiaries for inspection or for notification to the beekeeper when injurious pesticides must be applied.

Apiaries in California must be registered each November with the Agricultural Commissioner of the county in which the bees are located. Registration is free and consists of listing the location of each apiary and the number of colonies at each location.

Apiary movements must be reported within five days to the Agricultural Commissioner in the county where the movement originated. A similar notice must be sent to the county of destination if the colonies are moved to another county. The movement notice must indicate how many colonies were moved and how many colonies were left at the original location as well as describing the point of origin and destination.

Inspectors may enter any apiary to determine whether AFB disease is present. All colonies must be kept in

movable comb hives. Apiary operators must abate by burning or delivery to a licensed wax-salvage plant any AFB disease found in their apiaries. Any apiary in which AFB disease is found to exceed one percent may be placed in quarantine until the disease has been abated. Nothing may be removed from a quarantined apiary, except under the direct supervision of an inspector, unless a permit is obtained.

Extraction or rendering of honey, pollen or wax from comb must be done in a bee-tight building or enclosure. Supers of comb must be covered when being transported from an apiary. Stored supers of comb must be enclosed to prevent exposure to bees. Supers of wet comb must not be exposed to robbing in an apiary. Open-air feeding of honey is prohibited.

Revisions have also been made in certification requirements for bees and used beekeeping equipment entering California. Health certificates are no longer required for queen bees in screened cages with attendants. Certification is required on package bees, bees on comb, and used hives or appliances. Shipments of queen bees or package bees must be accompanied by an affidavit signed by the shipper indicating that only sucrose or manufactured invert sugar is used as food for the bees during transit.



## Editorial of the Month



### *More About the Farm Bill*

On August 8, 1961, President Kennedy signed into law the new farm bill officially known as the "Agricultural Act of 1961." It was a far cry from the program originally proposed by Agricultural Secretary Freeman.

The bee and honey industry doesn't need to be told that honey was deleted from the "Marketing Order" phase of the farm bill. It clearly states that honey is an excepted commodity, as it has been since 1937.

Along about June, an early version of the bill under consideration by the House Committee on Agriculture included honey, along with 5 or 6 other commodities entitled to marketing orders, if such could be agreed to and worked out to the satisfaction of the Secretary of Agriculture. This version was only of short duration and when and how it was dropped from the bill is not known to us. We do know that the July 27 Congressional Record reports that Congressman Sisk of California moved to amend the House version to include honey. This was briefly opposed by Congressman Harding of Idaho and the amendment was rejected by the House.

Congressman Findley of Illinois, a member of the House Agricultural Committee, stated that there had been almost an absence of testimony relative to honey in their meetings and no hearings had been held.

We do not have a complete story of the Senate version either. The Federal Register of July 26 reports more than five pages, each 3 columns wide, of debate on the floor when Senator Church of Idaho offered an amendment to except honey from the marketing order provisions of the bill.

Mr. Young of Ohio concurred in this as did Mr. Carlson of Kansas, Mr. Hruska of Nebraska and Mr. Keating of New York. Opposed to the amendment were Mr. McCarthy of Minnesota, Mr. Hickenlooper of Iowa and Mr. Holland of Florida. The amendment introduced by the Senator from Idaho passed. No hearings on honey had been held by the Senate Committee on Agriculture and Forestry.

All of the arguments on the floor of the Senate concerned the "pros and cons" of a Federal Marketing Order. The real issue, however, was whether or not the honey industry should have the opportunity to study all sides of the matter and arrive at their own conclusions, as was stated by Millard Cogshall in a letter read by Senator Holland.

To make honey eligible for a marketing order does open the door to such a possibility. It would give the industry the opportunity to work with U.S.D.A. officials in developing a program which must have the approval of the industry and the Secretary of Agriculture. The Federation officials have asked for consideration of a 3-fold program: mandatory funds for promotion, advertising and research, a grades program and some control of imports of honey.

The Agricultural Act of 1961 does not include the provision that mandatory funds can be raised for advertising and promotion. Except for provisions permitting the Secretary of Agriculture to propose legislation to Congress that he feels is important to the marketing program of any commodity, there is little to benefit our present status so far as the new farm bill is concerned.

As this is written, we are informed that a bill has been introduced in the House to amend the Agricultural Act of 1961 to include honey as a commodity entitled to marketing orders. This amendment does not include a provision for mandatory funds for promotion, advertising and research. We are told that a similar measure will be introduced in the Senate. From information in the Washington column of the Wall Street Journal we learn that adjournment fever grips Congress and that bills at this time die in droves.

Because of the extreme controversial nature of this matter, the American Bee Journal in this editorial, and the previous one in the August issue, takes no stand on either side. It does contend that it has a real obligation to its readers to keep the bee and honey industry properly informed.

In furtherance of this, the American Bee Journal is inviting the National Honey Packers and Dealers Association and the American Beekeeping Federation to present their views in signed articles in the October issue. In this, we must reserve the right to accept or reject and to edit, assuring both groups that factual articles written in the best interests of the industry will be acceptable.

Surely, there must be a common ground - a middle road - a way of progress for the bee and honey industry. Surely, there must be a mutual and acceptable way for the industry to adequately support its organizations and to raise sufficient funds for advertising, promotion and research. Isn't this our challenge of today?

# Your Questions Answered

EDITOR— W. W. Clarke, Jr.

204 Ag. Ed. Building  
Penn. State University  
University Park, Pa.

• *Question from*  
Perry Tourjee  
San Anselmo, California

I am a beginner, and last June captured a swarm of bees and put them into an apple box hive where they remained and have been very busy. The box was bottom up and set upon a detachable board, with a slot for the bees to pass through. But I wanted to transfer the bees to a regular hive, so in August asked a friend who knew something about bees. He obligingly filled a regular 10-frame hive with six frames of foundation, removed the apple box from its bottom board and set the box on top of the regular hive with nothing between them. He said the bees would thus have to pass up through the regular hive to get to their combs in the apple box and would probably move down into the regular hive. This worked out apparently well, as the bees have all remained and enter via the regular hive.

I saw my friend again last week and asked him about what to do next. He said about October to just remove the apple box, dump it as is on the ground beside the regular hive, and put a cover on the latter. The bees would promptly gather up all their belongings from the apple box and carry them into the hive.

Now I know that the apple box is festooned with honey combs, but whether the bees have moved any of it down into the hive is a secret between themselves and I don't feel too confident about dumping all that winter store onto the ground. So I would appreciate knowing the correct way to transfer my bees from their apple box to the hive, so that I can eliminate the apple box.

*Answer*

We usually do the job of transferring a little differently from the way suggested, although your method may work in California. We put the good hive body with removable frames on top of the box hive. When the queen is found to be laying in the new hive, the old box is placed on top over a queen excluder until all the brood has emerged (21 days). The old hive is then removed and the honey and comb rendered. The best place to put

any new foundation, if you expect it to be drawn into comb, is above the brood nest.

I would not do this transferring in the fall, but rather in the spring when there is a honeyflow. Your bees may starve this winter if you take away their food at this time; they certainly would in Pennsylvania.

It is highly unlikely that only the bees from the box hive will get the honey. It seems to me that all the bees in the area might come in and help themselves.

\**Question from*  
F. E. Shaw  
Brighton, Colorado

1. In transferring a colony from a box hive to a standard hive through a bee escape in the opening of an inner cover is it likely that a new queen would be produced by the bees in the box hive, presuming that the old queen was smoked out before the box hive was placed above? If so, how long should the box hive be left above? If it is possible a transfer division could be made.

2. What are the proper proportions of a sulfathiazole, terramycin, powdered sugar mix for preventive purposes, and how much of the mix for an average colony?

*Answer*

If you smoke the queen out of the box hive before placing it above a bee escape, I doubt that the bees will rear a new queen, unless you leave sufficient bees there to rear a queen and have given them an entrance to the rear of the hive. If you expect the bees in the box hive to rear a queen, it will take 16 days for her to emerge and about 10 days before she starts to lay eggs.

It seems to me that you are defeating your purpose when you expect the box hive to rear a queen and make a division. I thought you were trying to eliminate the box hive.

Not everyone agrees that sulfa or terramycin as a dust is a good preventive treatment for A. F. B. Also, not all states permit their use to cure or prevent disease. I can see no reason for feeding drugs unless there is



disease present in your area. I use 1 pill or ½ gram of sulfathiazole to 1 gallon of syrup and feed it to all the bees every spring. I think syrup is more effective than dust with sulfa. If terramycin is used as a dust, I use 1 part poultry formula terramycin (TM-25) to 4-6 parts powdered sugar. I only use this if I find disease present. Four to six treatments about a week apart seem to do a good job.

\**Question from*  
Mrs. Nicy Sullivan  
Carterville, Missouri

I was always wanting bees. At last I bought two colonies which will swarm and I don't know how you catch the swarms. I wonder if you will help me by telling me how it is done? I'm bothered about it because I don't know how or when they will swarm. In fact, I don't know anything about bees but I am very interested.

*Answer*

Books have been written on swarming and its control; so you see it would be difficult to explain in one letter. Bees usually swarm before the main honeyflow. In this area, we expect most of our problems in May and early June, and again during July in the buckwheat area. Queen cells will appear in the brood chamber to indicate their intention to swarm. The bees (about half of them), the old queen, and some drones will leave just before the new queen emerges. When they cluster on a limb it is simple to hive them. Place the hive under the swarm and shake the limb so the bees fall in front of the hive, they should walk right into the hive without coaxing. Some old combs in the hive make it more attractive.

Some swarming can be prevented by keeping the colony headed by a good young queen, giving the bees plenty of space for brood rearing and storing honey. Partial shade and extra ventilation may be of some value.





**Thirty-third Convention  
Southern States Federation  
Jackson, Miss., October 27-28**

The 33rd Annual Convention of the Southern States Federation will be held in the Heidelberg Hotel, Jackson, Mississippi, October 27-28. This is the big one. Last year in Chattanooga 21 states were represented. The AB-BA will hold its meeting on the 26th. Come and see your friends during the convention. It will be a rich and rewarding experience long to be remembered.

For the past 32 years beekeepers from 14 southern states and beekeeping specialists from all over the nation have met in conventions in various cities of the South. This fine

tradition is continued this year as we gather in Jackson, Mississippi, the crossroads of the deep South. Mr. Leslie Little of Tennessee, program chairman, and his committee are preparing a program in which beekeeping specialists from all over our nation will participate. Details of the program will be published later. In addition to the Heidelberg Hotel there are three other modern downtown hotels and 15 modern motels. There are several nationally recognized restaurants. Jackson is a transportation center served by 3 airlines, two bus and two train lines.

Hugh V. Maddox, Chattanooga  
Homer Tate, Secretary-Treasurer  
State College, Miss.

**Middlesex Association (Conn.)  
Haddam, Sept. 17**

The Fall Meeting of the Middlesex Association will be held at the Agricultural Center, Haddam, Conn., Sunday, Sept. 17, at 2:00 p.m. Potluck supper after the program. Bring a dish to pass.

The program will include a report on the Eastern Apicultural Society meeting at Connecticut University, Aug. 10-12; making the most of the honey crop; experiences in catching swarms; reports from those who experimented with Argentine rape. All interested in bees are welcome.

Cary A. Rowland  
Secretary, Middletown

**Cook DuPage Association, (Ill.)  
Garfield Park, Chicago  
Sept. 16**

The Cook-DuPage Beekeepers' next meeting will be held at the Gold Dome Building in Garfield Park at Washington Blvd., Chicago Illinois, September 16 at 8:00 P.M.

This will be the first indoor meeting of our cold weather get-together sessions and will start with a panel discussion. There should be a lot of questions as this is the time of year to know if we have had success or failure in our beekeeping work the past season and why.

Now take your calendar and pencil mark the 21st of October for our 41st Anniversary meeting and banquet. You will not want to miss this as our main speaker will be E. J. Dyce, Prof. of Apiculture, Cornell University. This will be the first time we have had this outstanding speaker whom we have met through the Journals but the most of us not in person. Watch the next issue of the Journal for a complete program. You will notice the date of this meeting has been advanced due to the bad weather the past year. No excuse for you long distance drivers this year, we hope.

For reservations please contact Edw. J. Danz, Secy. and Treas. at

1025 North Maplewood Avenue, Oak Park, Illinois.

Mrs. Klebes, our hostess says to bring sandwiches and cake also your table service for the September meeting. Something of importance forgotten, election of officers for the coming year, so come and vote and no gripes later.

Ralph O. Klebes  
Publicity  
St. Charles

**Oklahoma Association Annual  
State Capital, Sept. 11th**

The Oklahoma Association will hold its annual meeting at the State Capitol Building in Room 122 of the State Board of Agriculture, September 11th. Meeting will commence promptly at 10:00 A. M.

W. J. Lewis-President

**North Dakota Association  
Jamestown, Nov. 4**

The North Dakota Association will hold its annual meeting on November 4, in the Gladstone Hotel in Jamestown, North Dakota.

J. R. Dogger  
Secretary  
Fargo, N. D.

**Minnesota Honey Marketing Day  
Alexandria, Minnesota, Sept. 9**

Glen McCoy, Minnesota Honey Marketing Chairman, has set September 9 (Saturday) as honey marketing day for Minnesota beekeepers. Buyers will be invited to attend. Producers of honey are asked to bring representative samples to this event and make their offerings known to the packers and importers.

Commercial producers will be charged a fee of \$5.00. Smaller producers with 50 or more colonies will be charged \$2.00. No fee to packers. This event will be held at Alexandria, Minn. 75 to 100 producers are expected to bring their samples to this meeting.

F. Q. Bunch, Sec'y.  
Minnesota Beekeepers Ass'n.

**Midwestern Association (Missouri)  
Kansas City, Mo., Sept 10**

The Midwestern Association will hold its regular monthly meeting at the home of Mr. & Mrs. Walter A. Hill, 8440 Jarboe, Kansas City, Missouri, 2:30 P.M., Sunday, September 10. There will be a speaker and the subjects for discussion, packaging and sales. Refreshments will be served. Everyone welcome.  
James A. Worrel  
Secretary

**Northeastern Kansas Association  
Muncie, Oct. 1**

The Northeastern Kansas Association will meet Oct. 1 at 2:30 p.m. for the regular monthly meeting at the home of Mr. and Mrs. Maynard C. Curtis 9505 Kansas, Muncie, Kansas. E. W. Harman, Raytown, Missouri, will speak to us about labeling and marketing honey, and winter preparation of bees. This will be our last outdoor meeting for the season. You are invited to attend. Refreshments will be served.

Mrs. Bert M. Parrish  
Secretary

**Middlesex County (Mass.)  
Weston, Sept. 30**

The last outdoor meeting of the Middlesex County Association will be at the home and apiary of Mr. and Mrs. Putnam H. Flint, 34 North St., Weston, 2:00 p.m., September 30th. In case of rain it will be held Oct. 1 at the same time. The club hive will be awarded to the lucky winner. Picnic suppers will be enjoyed by members and friends and coffee and ice cream will be provided by the association.

Betty Carlson, Sec.  
Bedford

The 3rd meeting was August 17 at 7:30 P. M. at the same place. The time and place of each meeting is decided at the previous meeting. Enthusiasm has been high and participation good. Beekeepers and interested persons are urged to attend.

L. B. Davis  
(P. O. Box 888)  
Leland, Miss.

**Charles Reece Retires**

The Ohio Extension Service announces the retirement of Charles A. Reece as Extension Bee Specialist for Ohio, effective July 31. Mr. Reece, a graduate of Iowa State College, has been with the Ohio State Department, first as State Apiarist and later as Extension Specialist, for a total of 23 years.

# The Federation

**Secretary Joseph O. Moffett  
P. O. Box 855, Fort Collins, Colorado**

The main emphasis of the Federation recently has been to obtain legislation whereby money can be raised to advertise honey and to sponsor research work, so excessive imports could be somewhat controlled, and quality could be regulated.

*Beekeepers would vote on program.* The beekeepers would be allowed to vote on whether or not they wanted to accept the program. No production controls, marketing quotas, or restrictions on marketing are desired.

*Groups with self-help programs have prospered.* Generally, farm groups which have actively promoted their products have gotten a steadily increasing share of the market. Ones which have not done anything or have relied solely on price support have often lost ground. The future is what we make it. The bee industry will prosper or stagnate, depending on what we do as individuals and as a group. With the necessary legislation, we can get together and develop programs to advance our industry.

*Federation policy determined by elected officials.* Some beekeepers have asked who decides what position the Federation takes on legislation before Congress. The executive committee decides in accordance with their interpretation of resolutions passed by the membership and the board of directors. In the absence of specific instructions, this committee used their best judgment on what course to follow.

Five members of this committee are elected from the board of state directors. These directors have been select-

ed by the beekeepers of the states they represent. The remaining three voting members are the president, vice-president, and past-president. These have been elected at the general membership meeting at the annual conventions. Therefore, all Federation members have a voice in selecting the committee who makes these decisions.

*More states entering queens.* The fourth honey queen contest in Biloxi should be the best yet. Several more states are planning to send queens.

*Federation continues to grow.* Memberships and funds continue well ahead of 1960. With the continued and growing support of beekeepers, your Federation can serve you even better in the future. Send your 1961 dues to P. O. Box 855, Fort Collins, Colorado. Minimum dues are \$5.00.

**Delta Association Organized**

The Delta Beekeepers' Association was organized at the Delta Branch Experiment Station at Stoneville, Mississippi, at 7:30 P. M. on June 22. Twenty-two people attended this meeting, representing six Mississippi counties. Officers elected were: Pat N. Jemison, P. O. Box 469, Indianola, President; A. L. Trotman, 1499 Bradford Dr., Greenville, Vice President; and D. H. Wicker, 725 Mayer St., Greenville, Secretary-Treasurer.

The 2nd meeting of this new association was held at the same place at 7:30 P. M. on July 13. The weather was very heavy with wind and rain, and although some new faces appeared, only 19 were present.

**Obituaries**

**L. F. Childers**

The entire industry will be saddened by the loss of L. F. Childers of New Franklin, Missouri. Luke as he was affectionately known, was at one time associated with the University of Missouri. After retirement he developed a small farm and home at New Franklin, where he also produced honey and, with Mrs. Childers, became well known in the distribution of honey throughout the area.

Being plagued by AFB, as so many were in those days, he worked with Dr. Haseman at the University to test and affirm the use of sulphathiazole in the control of the disease. The use of this drug has saved the industry millions of dollars in operational costs and in colony losses.

Luke was modest and unassuming and few knew him as a stalwart figure in the beekeeping industry but his writings had much force and vigor. In May he wrote that Mrs. Childers passed away April 20th following an automobile accident. He had decided to stay on the farm but he became ill with a malignant tumor near the pancreas which resulted in his death.

According to his daughter, Mrs. Anne Barton, of Nevada, Missouri, he had an operation for the removal of the tumor but never recovered. He passed away while dozing in a chair in his daughter's living room. He was 83 years old.

His son, Norman F. Childers, of Milltown, New Jersey, writes that the family will dispose of his bees and supplies. If any reader is interested write to Mrs. Anne G. Barton, 720 South Clay St., Nevada, Mo.

M. E. Ballard

Those persons interested in beekeeping, throughout the world, will be grieved to learn of the death of M. E. Ballard, at his home in Roxbury, N. Y., on July 9th.

Mr. Ballard was born on April 8, 1888, in North Branch, N. Y. Around 1915, he moved to Roxbury and started beekeeping on a larger scale, eventually becoming one of the largest commercial beekeepers in New York State.

He was well known for his tireless energy, grit, and determination. He corresponded extensively with many people interested in bees, and their products, in the United States and several foreign countries.

Mr. Ballard is survived by his wife, who was Miss Alma De Forth before their marriage on April 7, 1928, in Buffalo, N. Y.; a son, Paul; and three grandchildren.

Paul is one of the progressive young beekeepers in N. Y. State, having a beekeeping business of his own. He will endeavor to carry on his father's business, as Administrator, until the estate is settled.

K. N. Folsland

One of South Dakota's oldest and most prominent beekeepers, K. N. Folsland, of Oldham, died July 13 at the age of 79. He helped set up laws for the State and he was a bank official, writer, church worker, in fact a pioneer for South Dakota's welfare. His son and grandsons will carry on in the same spirit. He was helping two grandsons in the honey house when stricken with a heart attack.

Alvin G. Ranum

Alvin G. Ranum, Blue Mounds, Wisconsin passed away on July 31, after a brief illness.

Mr. Ranum was born February 19, 1906, at Mt. Horeb, Wisconsin. He was a graduate of Mt. Horeb High School. For a number of years he was employed as a guard at the Wisconsin State Prison at Waupun. In 1947 the family moved to Denver, Colorado, where he worked as a carpenter. In 1955 they returned to Blue Mounds and became a joint operator of the Ranum Bee Farm. Surviving are his wife and one daughter.

Mr. Ranum was a member of the Wisconsin State Beekeepers' Ass'n., and the American Beekeeping Federation. He was also a member of the Federation group life insurance plan.

## Honey Bees Attend National Convention

by C. D. Floyd



C. D. Floyd's "HONEY GIRLS" Bette, Leslie and Cindy register Home Economists at A. H. E. C. Convention at Cleveland, Ohio.

The American Beekeeping Federation's honey booth at the American Home Economics Convention in Cleveland in June proved to be a very popular exhibit at this large convention. The color of the display along with the interesting facets pertaining to pollination and honey and wax production drew many comments from the visitors stopping at the booth.

An observation hive provided by the A. I. Root Company became the point of conversation for many who stopped to study the activity under the glass.

An indirect approach to capture the attention of convention visitors was embodied in the theme of the exhibit, "Honey Recipes are an American Heritage Given from Mother to Daughter." The idea was to bring back fond memories of goodies always present when visiting grandmother's at Thanksgiving time. A honey recipe folder containing 10 simple foolproof recipes in an attractive color proved to be very popular.

The young ladies registering visitors gave out over 2000 8 oz. jars of honey provided by some of the nation's honey packers that serve the Great Lakes area. The industry gives thanks to T. W. Burleson & Son of Waxahachie, Texas; R. D. Bradshaw & Sons of Wendell, Idaho; The Lakeshore Honey Company of Chicago, Illinois! The Sioux Honey Company of Sioux City, Iowa; Rocke Apiaries of Eureka, Illinois and to Jewett and Sherman of Milwaukee, Wisconsin for their fine support and contributions to the marketing effort.

An excellent, new and up-to-date mailing list of patrons interested in

using honey was acquired as a result of the registering and classification of those attending this convention. We are now in the position to send to many home economics teachers, useful teaching aids and other material that can be used in forwarding our promotional program in the school systems of the nation. The choice of Cleveland as the convention city this year with dates set in June helped to provide record crowds which resulted in our registering more guests than ever before. The wonderfully large auditorium in Cleveland provided excellent accommodation as the entire area was air conditioned and crowding was at a minimum which allowed the personnel of the booth a fine opportunity to discuss honey and honey recipes with visitors.

Mrs. Harriet Grace, Director of the Honey Institute and Mrs. Mona Schaefer Director of the California Honey Advisory Board both visited the booth while in attendance at the convention. Other distinguished visitors attending were several staff members of the A. I. Root Company, representatives of the Sioux Honey Association, and several honey brokers who maintain offices in the Cleveland area.

The plans for the 1962 convention are already underway. Miami, Florida is very apt to be the convention city for next year, which will give Floridians and other southern beekeepers an opportunity to put their shoulder to the wheel in the never-ending job of keeping our delicious product in the minds of this important group of home economists who teach our children and help shape the menus of the nation.



#### Michigan Association At Work

The Michigan Association has a novel method of advertising honey and beekeeping as well as themselves. On a 6 x 9 card, printed in two colors, they have mounted at one side a small cake of beeswax; and above it a sample of Michigan honey in a cellophane bag with prominent titles of *HONEY* and *BEESWAX*.

Running in a column alongside are facts about bees, the number in a hive, their flight range, etc. with

special attention to their value as plant and flower pollinators and their necessity in farming and food producing.

The whole makes an attractive gift to distribute generally. We have no doubt but that data on the cost of these give-away packets may be obtained by addressing Margaret F. Seidelman, Michigan Secretary, at Ionia, Michigan.

#### Cook DuPage, (Ill.)

Ellsworth Meineke, Meineke's Honey Farm, Palatine, Ill., sends a clipping, almost an entire newspaper page, with five pictures, telling of his own beekeeping and the activities of the Cook DuPage Association. Few groups get this publicity. It is not unusual for their meetings to have an attendance of 200 or more. Such a total is seldom surpassed at meetings of state or regional organizations.

#### NOW AVAILABLE FOR YOUR BEEKEEPERS' MEETINGS—

A complete set of colored slides on the fascinating story of hybrid queen development. Interesting - educational - factual. No charge for their use - Write direct to Dadant & Sons, Inc., Hamilton, Illinois and they will be mailed promptly. To be returned after use.

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**QUEENS QUEENS.** Two extra good strains. Dadant's Starlines and our regular stock. Good workers and very gentle.

**STARLINE**  
1 to 25 ..... \$1.30 each  
25 to 100 ..... 1.20 each  
100 up ..... \$1.10 each  
Tested queens—\$2.00 each

**OUR REG. STRAIN ITALIANS**  
1 to 25 ..... \$1.10 each  
25 to 100 ..... 1.00 each  
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Royal Jelly—\$10.00 oz.

*Queens clipped and marked 10c each*

Alamance Bee Company, Geo. E. Curtis & Sons, Graham, N. C.  
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## QUEENS

**Italian or Caucasian**

SEPTEMBER, one of the best months in the year to re-queen.

Get a good, young queen in those colonies. It will insure plenty of young bees in the Spring and help control swarming.

The price is very reasonable also.

### PRICES

| In lots of | Queens | 2 lb./Q. | 3 lb./Q. | 4 lb./Q. | 5 lb./Q. |
|------------|--------|----------|----------|----------|----------|
| 1 - 24     | \$ .75 | \$3.75   | \$4.90   | \$5.75   | \$6.75   |
| 25 - 499   | .70    | 3.30     | 4.45     | 5.20     | 6.00     |

**Tested Queens \$1.50 each**

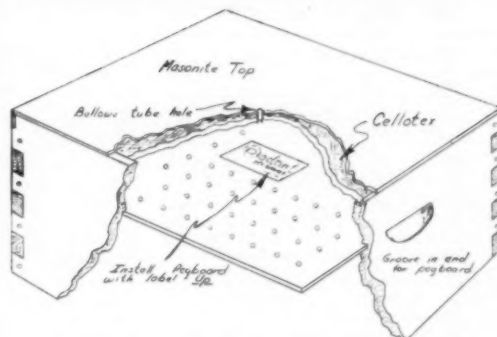
Queens Postpaid - Airmailed - Clipped - No Extra Cost

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Minimum upkeep; no parts to get out of order. Will Last for Many Seasons.

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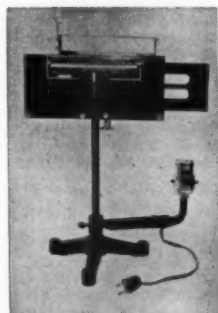
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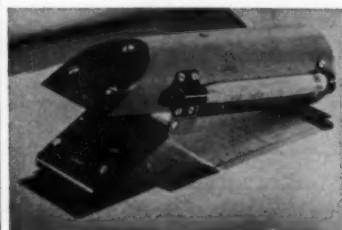
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### HONEY REFRACTOMETER



Checks the moisture content of your honey.

Scale Range 12.5% to 26%.

*Write for Prices.*

## QUEENS:

For better wintering and larger honey crop next year replace those old queens now while young queens are available at lower prices.

We select breeders that show qualities desired for better crops and easier handling.

|         | REGULAR<br>ITALIAN | ISLAND<br>HYBRID |
|---------|--------------------|------------------|
| 1 - 24  | ... \$1.00 each    | \$1.30 each      |
| 25 - 99 | .... .90 each      | 1.20 each        |
| 100 up  | .... .80 each      | 1.10 each        |

All queens clipped unless ordered otherwise.

Queens marked by request 10c each extra.

*"They Produce"*

**ROSSMAN APIARIES**

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**CARNIOLAN QUEENS:** Untested queens \$1.00 or \$85.00 per hundred. Tillery Brothers, R. 3, Greenville, Alabama.

**CAUCASIAN QUEENS** \$1.00 each. Eppling's Apiaries, Edgemont, Covington, Virginia.

**QUALITY ITALIAN queen bees** - summer prices - each \$1.00, 5 or more \$.90 each, 25 or more \$.85 each. A. G. Woodman Co., Grand Rapids 4, Michigan or Lena, S. C.

**QUALITY BRED Caucasian queens** bred for honey production, hardiness and gentleness. Breeders furnished by J. E. Hastings. 1-24, \$1.10 each, 24-99, \$1.00 each, 99 up, \$.90 each, all queens by air mail. Walter D. Leverette Apiaries, P.O. Box 374, Dallas, Georgia.

**DOUBLE GRAFTED Jumbo Italian queens** \$1.20 each, \$12.00 per dozen. Sheppard Apiaries, Aberdeen, North Carolina.

**PRODUCTIVE ITALIAN QUEENS**—\$1.00 each; 10 up, 90c. Shirl Baker, Mecosta, Michigan.

## FOR SALE

140, 10-frame colonies 5 high, majority equipment year old. Paul W. Bergman, 6811 Holdrege St., Lincoln, Nebraska.

**FOR SALE:** Littlefield Apiaries, Exira, Iowa. Over 800 colonies in 28 yards within 20 mile radius of Exira. 70 lb. honey per colony to winter. Honey house in Exira on one-half block of ground. Fully equipped special uncapping machine and extractors eliminate need of removing frames from supers in extracting. Five settling tanks. 1961 honeyflow over 100,000 lbs. Desire to sell as a going business. Sale made necessary by death of Roy S. Littlefield. Contact Ena S. Littlefield, Executrix or Frank N. Rasmussen, Att'y, both of Exira, Iowa.

**FOR SALE:** 86 colonies, 10 frame equipment, extracting supers, crop included. Laurence Holdeman, Harrison, Michigan.

**FOR SALE OR LEASE:** 300 colonies with ample locations. Equipment for additional 500. Residence, established honey stand, honey house, storage buildings, truck loader and tractor. Ira L. McCaleb, 8805 Elizabeth Lake Road, Palmdale, California.

**FOR SALE:** Complete commercial outfit in northern Nebraska. Write for details. Box NTI c/o The American Bee Journal.

**INSPECTED queen rearing operation** in northern California with locations. Capacity for 1800 4-frame nuc sides, 200 colonies. 1956 1½ T. truck with loader. All necessary equipment including extracting. For sale or lease 28 x 56 warehouse with modern 1-bedroom apartment, excellent deepwell water supply. Box CBA c/o American Bee Journal.

300 Standard, 2 story hives, excellent shape, production equipment for honey, royal jelly, queen, or package. Owner retiring. Very favorable records available. Located in citrus, all year jelly production, trade has taken all jelly that could produce in the past, honey picked up at shed, 1960 production over 50 barrels. Five room and bath masonry house for sale or lease. All for sale or share deal with option to buy

to sincere, ambitious, bee man with references. Reasonable prices. Write for details on bees or house. Marvin Brown, Rt. 1, Box 215, Denver, Fla.

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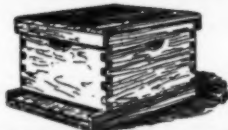
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# Crop and Market

by M. G. Dadant

## CROP SO FAR

Comparing reports from the New England States would indicate that Maine and Vermont do have considerably more honey than a year ago. The balance of this area perhaps is somewhat less.

New York likely less so far than last year. Virginia and West Virginia ranging more, as well as Georgia; with Florida probably somewhat short of the 1960 season. As we cross over the Southern States, Alabama perhaps equals a year ago; the balance of the South with not over 75 per cent of a year ago and much less in Texas. This includes Arizona and Oklahoma where there has been a drought. Kentucky and Tennessee seem to have more than a year ago. Ranging west from Pennsylvania through Ohio, Indiana and Illinois, the crop no doubt will be somewhat less than a year ago up to this date. Southern Iowa similarly and perhaps in most parts of Missouri. Michigan apparently has not had as good a

crop as a year ago and this applies perhaps to southern Wisconsin, southern Minnesota and into Iowa. However, in the northern section of these states, as well as in southern North Dakota and in South Dakota and Nebraska, as well as in Iowa, crops are probably better up to August 10 than a year ago and extremely better in Nebraska which has had a "bumper crop." Northern North Dakota extending into Montana and Idaho, the crop earlier has been much less than a year ago. Wyoming probably as much, Colorado probably somewhat more, New Mexico and Arizona and Oregon less and California probably less except in the irrigated areas. The dry areas of California never have yielded this year. Washington seems somewhat better.

All in all, if we were to judge on the crop up to August 1, we would state that it is considerably short of a year ago, but the smattering reports of some beekeepers in nearly all states of bumper crops, show that the crop

was not uniform in any state. This undoubtedly will affect the total. There has been, however, a fine amount of beautiful white honey produced.

## PROSPECTS

Here is where we meet the issue as to whether or not the total crop will be up to 1960.

All of the areas where rains have recently fallen and that is practically all of the fall honey areas, look decidedly good for this fall if the weather holds out satisfactorily so that the bees can gather.

This would extend, of course, through from New York west including southern Michigan and northern Indiana into Wisconsin which in the southern part already has a crop equal to a year ago. May also affect the plains states and no doubt rains which have fallen, will have some effect on the late crop even in Montana, Idaho and in the western Da-

(Please turn the page)

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## Crop and Market—

kotas where the crop has been short. The intermountain territory does seem decidedly better including Nevada, Utah and Colorado, particularly on the western slope where the honey crop was not so good last year and this applies also to the San Luis Valley.

All in all we would construe that the prospects in most cases are better than a year ago, at least for a fill-up of the colonies and probably for surplus fall honey.

We hesitate to predict that the total crop will be up to 1960 but it does look that it might equal it if honey yielded after the date this is written, on August 20, should be what the prospects would indicate.

The eastern Canadian provinces are about equal to a year ago; western provinces unfortunately which suffered with Montana and northern Minnesota, can hardly, even with rains, make up the loss of the early crop. British Columbia perhaps equal and somewhat more than a year ago, but the total Canadian crop undoubtedly should be much under what it was in 1960 even though this was not a bumper year.

### TOTAL CROP

As we have mentioned above, the total crop may come up to last year or possibly a little bit more. Some of the states which will be contributing to such an excess would be Maine, Vermont, West Virginia, Virginia, Georgia, northern Illinois, northern Iowa, Missouri, Nebraska, Colorado, Utah, Nevada and possibly the late crop in

California may carry it along to last year's moderate crop.

### PRICES

It is too early to give very much information of what prices are going to do this year. Buyers are active only in unusual instances where the buyers are short of honey or rather where the packers are. In the areas where there are not too many commercial beekeepers, we have been reported on prices at least the equal of last year and, of course, where the crops have been short this year, there is indication that the beekeepers will not sell at less than they got a year ago and we have even had two or three reports of honey selling at somewhat more. This includes amazingly California where there are reports that the crop is moving off at  $\frac{1}{2}$  cent to 1 cent per pound higher than last year. This, of course, gives a very desirable indication of what it might do farther east where the tendency has been for the prices offered at least to be from  $\frac{1}{2}$  cent to 1 cent under a year ago with considerable sales made on a 13 cent basis f.o.b. honey house. The packers, we believe, even though they have a carryover of Argentine honey, are pretty well clear of domestic honey and much more so than they were at August 1 of last year when they were vigorously buying at an advance over the previous year. There is cer-

tainly going to be some "jockeying" to get honey at a price from  $\frac{1}{2}$  cent to 1 cent below last year. Many producers with good crops on hand may be tempted to go ahead on this basis but it is our firm belief that the shortage in California honey, may have an indication of where the possibilities may be. Undoubtedly the packers will have to be restocked for their winter season and, of course, Argentine honey which is our chief importation, together with some Mexican, will not be available in time to bridge the gap so as to give the packer all the honey he may need in the interim.

On the whole, the market is starting out very sluggish because of the reticence of packers who offer price or if so at a lower figure than a year ago. The writer hopes that this may in some part be corrected, particularly when there is a possibility that Eastern honey may move into the California market owing to the heavier demand there and the shortage of good white domestic California honey, except in the irrigated areas.

As the writer said before, many individual beekeepers are holding for at least last year's price, there is a tendency for many commercial beekeepers to at least wait until the market has hit its fall stride, but on the whole, there is a tendency for buyers to offer in the neighborhood of  $\frac{1}{2}$  cent per pound less than a year ago for fine white honey and on the other hand a tendency on the part of the producers to hold at last year's price at least until there is a definite market established.

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## Short Items

### TV of Beekeepers at Southern Conference, Chattanooga

We are advised by Hugh V. Maddox, who was secretary-treasurer of the Southern States Beekeeping Conference, that Drue Smith, radio and TV personality, interviewed several of the convention people and made a tape recording of it which was broadcast over CBS coast to coast on Thanksgiving Day on the "In Person" program.

Some of them interviewed were: Maddox, Miller, Root, Farrar, Killion, Honey Queen Monica McNutt, Chattanooga Honey Queen, Myers, Dunham, Whitcomb, Little, Brock, Darnell, Harriet Grace, Reese, York, Puett and Stephen.

Mr. Smith made the remark that many at CBS had stated that this was one of the most interesting programs

they had seen broadcast. All the better for the honey industry in general.

### Bee Museum in Norway

It might interest your readers to learn that the first Bee Museum in Norway was opened last week in the fjord village of Billingstad near Oslo.

The museum has already gotten together an impressing array of interesting exhibits, and a special section has been set aside for a library with old and new literature on beekeeping in various countries around the world. The driving force behind this new venture, is Mr. Odd Rosenberg who is the secretary general of the Norwegian Beekeepers Association (Kristian Augustsgate 14, Oslo).

P. Prag  
Norwegian National Travel Service

### Swiss Concerned Over Imported Honey

"Journal de La Suisse Romande," organ of the French Swiss beekeepers, reports a total importation of 7 million pounds of honey in 1960, at an average price of 28 cents, duty included. On the other hand, honey imported from France brought nearly 50 cents a pound.

While it is admitted that most foreign honeys were dark and rather strong in flavor, these honeys are to be reckoned with when it is admitted that per colony averages of Swiss beekeepers are relatively low. And it must also be admitted that bees are necessary for pollination in Switzerland. The association has appealed to the government to give them relief in some fashion from imported honey.



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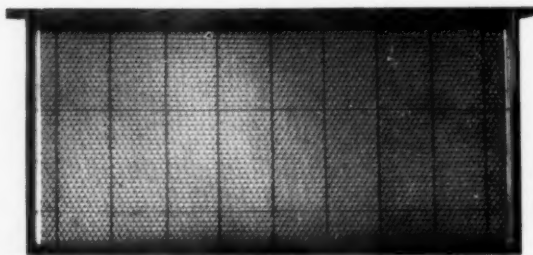
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